Report of the Snowmobile Safety Working Group

Submitted to the Honourable Steve Ashton Minister of Transportation and Government Services

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Report of the Snowmobile Safety Working Group

1. Executive Summary

1.1 Introduction

Snowmobiling is a popular winter recreational activity in Manitoba as well as a means of transportation, especially in the northern and remote areas of the province. During the winter season of 2000/01 there were a high number of snowmobile-related fatalities (12) that gave Manitoba the unenviable distinction of having the highest average fatality rate per registered snowmobile, with 3.9 fatalities per 10,000 registrations, when compared to several other Canadian jurisdictions.

In order to investigate this matter, the Minister of Transportation and Government Services, who is responsible for legislation governing the operation of off-road vehicles including snowmobiles under the *Off-Road Vehicles Act*, struck a Snowmobile Safety Working Group. This group, which comprised representatives of various stakeholder groups as well as departmental officials, had the mandate to review available statistics and data, identify snowmobile safety issues and measures to address those issues, and to provide a written report of its recommendations to the Minister. The Snowmobile Safety Working Group held a series of meetings and after a careful review of all available statistical data, various reports, and anecdotal evidence it formulated a number of recommendations for the Minister's consideration.

1.2 Summary of Recommendations

The end result of the deliberations of the Snowmobile Safety Working Group was the development of a number of recommendations that encompass three broad categories: enforcement issues, public education and awareness, and the legislative changes that would be required to support the foregoing.

In summary, the recommendations of the Snowmobile Safety Working Group, in no particular order of importance, are as follows:

Recommendation 1
The *Off-Road Vehicles Act* should be amended to include a requirement for all snowmobiles to display identification decals that would enhance the existing snowmobile identification system. Implementation of a decal system will improve the ability of law enforcement officers to identify machines for enforcement purposes.

Recommendation 2
The *Off-Road Vehicles Act* should be amended to provide traffic authorities with the authority to set speed limits for snowmobiles within their respective jurisdictions. This provision will provide local traffic authorities with the opportunity to determine the speed limits most suited to the conditions that exist within their community. Some civic authorities already set speed limits for snowmobiles but without the clear authority to do so; this amendment will provide the legal authority for these bodies to take such action.

Recommendation 3
The *Off-Road Vehicles Act* should be amended to create a "drive imprudently" provision to further enforce safe driving behavior by snowmobile operators. This charge includes the concept of "driving too fast for conditions" which is appropriate both in the absence of speed limits or under set maximum limits when conditions warrant a slower speed for safe operation.

Recommendation 4
The *Off-Road Vehicles Act* should be amended to eliminate all exemptions from mandatory helmet use to improve snowmobile safety for all snowmobile operators and their passengers. This recommendation will also require regulatory changes.

Recommendation 5
A regulatory amendment should be approved which would eliminate many of the existing exemptions from the mandatory registration of snowmobiles. This measure would facilitate the identification of most snowmobiles and provide a more accurate database on which to base the development and assessment of future safety related measures.

Recommendation 6
A working group should be established to develop a snowmobile safety certification program. Further, the mandate of this working group should also include consideration of a mandatory certification program and age appropriate operator restrictions for young operators. If the Snowmobile Safety Working Group is continued as an Off-Road Vehicle Safety Working Group, as recommended, this task could be assigned to a sub-committee of the Working Group.

Recommendation 7
The government should actively encourage individuals currently delivering public education services to participate in train-the-trainer programs to facilitate the delivery of snowmobile safety through the existing government service delivery infrastructure. For example, many agricultural representatives provide training programs related to safe farm practices in rural areas; the driver training program delivered in Manitoba high schools has a pool of experienced trainers who could potentially deliver snowmobile safety certification programs.

Recommendation 8
Public awareness campaigns that deliver the message that consuming alcohol while operating a snowmobile is both illegal and socially unacceptable should be developed.

Recommendation 9
Public awareness campaigns that promote the use of helmets for operators and passengers on snowmobiles should be developed.

Recommendation 10
The Snowmobile Safety Working Group should be continued. The working group should be reconstituted and given a mandate to include a review of measures that could enhance the safety of all off-road vehicles as many of the safety concerns associated with snowmobiles also apply to other types of off-road vehicles. Reconstitution of the working group is necessary in order to ensure the inclusion of representation from stakeholder organizations that are more specific to other types of off-road vehicles.

1.3 Conclusion

From the outset, the Working Group recognized that Manitobans enjoy both recreational and economic value from the use of snowmobiles as recreational and utility vehicles. The recommendations were developed within that context and intended to promote safe snowmobile operation without placing undue hardship upon the owners of these machines. The Working Group also focused on the high incidence of snowmobile-related fatalities and injuries and the high costs associated with snowmobile crashes[1] to individuals and families in terms of injury and death and the related healthcare costs borne by all Manitobans. The task of the Snowmobile Safety Working Group was to blend all of the above into a comprehensive package of measures that would enhance snowmobile safety. The Snowmobile Safety Working Group respectfully submits its findings and recommendations for the Minister's consideration.

[1] The term "crash" has been utilized in this report as opposed to "accident" which implies that the incident was unforeseen. Most crashes have many of the same aspects and therefore are predictable.

2. Background

2.1 Introduction

During the winter season of 2000/01 there were twelve snowmobile-related fatalities in Manitoba. In response to the need to consider ways to address snowmobile safety issues, the Minister of Transportation and Government Services struck a Snowmobile Safety Working Group with a mandate to provide recommendations for improving snowmobile safety to the Minister.

The Snowmobile Safety Working Group, comprising representatives from Manitoba Conservation, RCMP, Manitoba Public Insurance Corporation (MPI), Winnipeg Police Service: River Patrol, Snoman Inc., Office of the Chief Medical Examiner, IMPACT (the Injury Prevention Centre of Children's Hospital), Manitoba Safety Council and Division of Driver and Vehicle Licencing (DDVL) staff, held a series of meetings to review statistics and consider means of improving snowmobile safety[2]. The Department of Transportation and Government Services researched snowmobile statistics and information from other jurisdictions, solicited research from other specialist areas and established terms of reference for the Snowmobile Safety Working Group[3].

In brief, the terms of reference for the Working Group were as follows:

- review accident statistics;
- provide opportunities for input from other interested parties on safety perspectives;
- identify underlying snowmobile safety issues;
- develop new safety initiatives and directions; and,
- make recommendations to the Minister of Transportation and Government Services.

The Working Group heard presentations from several interested parties including a Manitoba nurse with experience in the treatment of snowmobile crash victims and various DDVL staff members with expertise in specific areas under study by the Working Group. After a review of available statistics related to snowmobile accidents, injuries and death, and the practices of other jurisdictions the Working Group agreed that the three broad categories, as outlined in the scope under the terms of reference, would be used as a functional basis for its review: enforcement issues, public education/awareness, and legislative changes that would be required to support the foregoing. Further, it was also determined that the scope of the study should be expanded to include injuries, as well as fatalities, that were incurred as a result of a snowmobile crash.

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[2] The Department of Justice declined an invitation to participate in the Snowmobile Safety Working Group. The full list of participants is attached as Appendix A.

[3] The terms of reference were drafted by the Division based on the mandate as provided by the Minister of Transportation and Government Services. (Appendix B).

2.2 Current Manitoba Legislation

Recognizing that legislation can be a tool used to facilitate safe operating practices and is the basis for enforcement, the Working Group considered current legislation related to the operation of snowmobiles, throughout the review process. The *Off-Road Vehicles Act* (ORVA) includes the following:

Registration and Insurance

MPI is the sole provider of the minimum compulsory $200,000 third party liability coverage for off-road vehicles (ORV). This coverage protects owners from liability arising from property damage, injury, or death claims. The registration/insurance certificate must be carried by the operator at all times while operating the vehicle.

For new registrations, in addition to the registration/insurance certificate, an owner receives a licence plate. For renewal registration, an owner receives a validation sticker to affix to the plate.

On snowmobiles, the plate is required to be fastened on the left side in the space between the lower edge of the seat and the running board, as close to the rear of the vehicle as possible.

Exemptions from Registration/Insurance Requirements

Registration and insurance are not required if the snowmobile is:

- Owned by a non-resident (who does not reside or carry on business in Manitoba for more than three consecutive months in any year) and who has registered it for the current registration period in his or her home jurisdiction.
- Operated exclusively on property occupied by the vehicle owner.
- Owned and operated by a commercially-licenced fisherman while using the vehicle for commercial purposes or a trapper using the vehicle in a registered trapline district or special trapping area.
- Owned and operated on behalf of the Department of National Defence and bears a number plate or other identification issued by that department.
- Owned by, or in possession of, a dealer and bears an ORV dealer's plate.
- A competition vehicle that is operated exclusively on a competition circuit.
- Owned by a resident of a remote community while the vehicle is operated in the remote community.

Transfer of Ownership

When ownership is transferred, the registration and insurance automatically expire. The original registered owner must return the licence plate and registration/insurance certificate to an Autopac outlet or a DDVL office. After a void sticker is applied, the licence plate will be returned to the registered owner. If the original registered owner acquires another ORV within seven days of transferring ownership, he or she may transfer the original plate to the newly acquired vehicle for the balance of the seven days without it being registered under the Act.

A Transfer of Ownership Document (TOD) is part of the registration certificate. At the time of sale of a snowmobile the seller signs the TOD and fills in the odometer reading, if applicable. The serial number on the TOD must match the serial number noted on the bill of sale and the vehicle itself.

Age Requirements

Children under the age of 14 years are not permitted to operate an ORV unless supervised, accompanied by, and at all times, within clear view of a parent or a person who is at least 18 years old and authorized by the parent.

Helmet Use

All snowmobile operators and riders must wear properly fastened safety helmets unless the vehicle is equipped with rollover protection and the occupants are wearing securely fastened seat belts.

Safety helmets must conform to all the requirements of any one of the following standards:

- Canadian Standards Association Standard D230, "Safety Helmets for Motorcycle Riders", bearing the monogram of the Canadian Standards Association Testing Laboratories;
- Snell Memorial Foundation "Standard for Protective Headgear" bearing the certificate of the Snell Memorial Foundation;
- United States of America "Federal Motor Vehicle Safety Standard 218" bearing the Symbol DOT;
- American National Standard "Specifications for Protective Headgear for Vehicular Use" Z90.1 bearing the American National Standard Institute Label; or
- British Standards Institution "Protective Helmets for Vehicle Users" respecting motorcycle helmets.

Farmers, commercial fishermen, hunters, and trappers are exempt from mandatory helmet requirements when engaged in their occupations, as are owner/operators within remote communities. Manitoba Hydro staff north of the 53rd parallel are exempt from helmet regulations between May 1 and October 31 only while servicing tower lines.

Enforcement officers conducting enforcement under *The Wildlife Act* or *The Fisheries Act* are also exempt.

Roadways

Operating a snowmobile along a roadway is strictly prohibited. Crossing a roadway is permitted within five metres of an intersection if the operator holds a valid driver's licence, other than a beginner's permit. Only one snowmobile is allowed to cross a roadway, where permissible, at a time (two or more cannot cross together). The snowmobile must come to a complete stop and yield right-of-way to pedestrians and approaching traffic.

If intersections are more than three kilometres apart, an operator may cross at any other point along the highway where he or she has a clear view of oncoming traffic.

The traffic authority can permit snowmobile operators to operate on a roadway if it has instituted a by-law permitting such operation. Crossing a roadway is also permitted at any place designated by the traffic authority.

Roadway Shoulders

Snowmobiles are not allowed to operate on the shoulder of a roadway.

Medians

Operating a snowmobile on or across the median of a divided highway is prohibited.

Ditches

Operating a snowmobile in ditches is allowed as long as the operator travels to the right of the roadway and shoulder in the same direction as vehicle traffic on that side of the roadway.

Parking Lots

A snowmobile can only be operated in a parking lot if it is used to gain access to or from a snowmobile use area; or to the vehicle that was used to transport the snowmobile to the snowmobile use area.

Towing

A snowmobile cannot tow a trailer, sleigh, cutter, toboggan or other apparatus across a roadway if the towed vehicle is carrying a person. The exception to the law is if the person on the towed vehicle is non-ambulatory or the towed vehicle is disabled and needs a person to steer it.

Private Land and Dwellings

No person shall operate a snowmobile:

- On privately owned land without permission of the owner/occupier;
- Within 30 metres of a dwelling between midnight and seven o'clock in the morning unless the dwelling is on the operator's own property, or the operator is an invited guest, or the dwelling is under the operator's control;
- Within 30 metres of a playground or area set aside for recreational use, unless the area is fenced or the snowmobile is being used for maintenance or operation of the area.
- On crown land allocated by lease or permit without the consent of the occupier of the property.

Reporting Accidents

All accidents involving snowmobiles must be reported to police within seven days if the accident resulted in injury, death or property damage totaling more than $1,000.

2.3 Snowmobile Registration in Manitoba

In March 2001 there were a total of 21,491 snowmobiles registered in Manitoba. The number of snowmobiles registered in Manitoba was correlated with the total population in a region, using Regional Health Authority (RHA) regions to define regions. The highest population percentages (56.61%) as well as the highest number of registered snowmobiles (27.95%) are within the Winnipeg RHA[4].

A survey of selected Canadian jurisdictions[5] demonstrated that Manitoba has the highest number of types of exemptions from mandatory registration. With the exception of four provinces, all other jurisdictions surveyed have exemptions for snowmobiles operated only on private land. In Ontario, some residents, such as those living in northern Ontario or Aboriginal persons, are not exempt from the registration requirements but are exempt from paying the annual validation fee and/or the registration fee. Snowmobiles driven only on private land owned or occupied by the owner are exempt from registration but not insurance requirements.

Given the high number of provisions for exemptions from the mandatory registration of snowmobiles in Manitoba the actual number of snowmobiles in use is most likely

[4] Snowmobiles Registered by Regional Health Authority Regions (Appendix C)
[5] Transportation and Government Services, Transportation Policy, Planning & Development Division, Survey of Canadian Jurisdictions regarding snowmobile practices (Appendix D)

substantially under reported. The number of unregistered snowmobiles is unknown, however, if the populations of Manitoba and Ontario are used for comparative purposes, Manitoba's population is 10% of the population of Ontario[6]. In Ontario, which has very few exemptions from registration, there are 300,000 snowmobiles accounted for. Using the 1:10 population ratio, we could assume that Manitoba has 30,000 snowmobiles in use. There were approximately 21,500 registered snowmobiles in Manitoba in 2001, which would result in approximately 8,500 (28.3%) unregistered snowmobiles.

The under reporting of the total number of snowmobiles in operation in Manitoba would skew the higher percentage of fatalities per snowmobile attributed to Manitoba in comparison to other jurisdictions. Apart from Manitoba's ranking or the perceived level of seriousness associated with the high number of fatalities, any measures that could reduce the number of fatalities as a result of snowmobile accidents in Manitoba should be considered worthwhile and a desirable outcome.

2.4 Fatalities and Injuries Resulting from Snowmobile Crashes

Information regarding the location of fatalities from 1991 to 2001, which were a result of a snowmobile crash, was extrapolated from data provided by the Chief Medical Examiner' s Office and applied to RHA regions[7]. The greatest number of fatalities occurred outside of Winnipeg in the Burntwood, North Eastman, Interlake and Parkland regions of the province. Correlations with Snoman Inc. regions[8], which are broader than the RHA regions, indicate that most fatalities occurred in the Northern region (34) followed by Eastern (21), Western (16) and Interlake (15). Central (southern Manitoba) experienced the fewest number of fatalities (5) during this timeframe.

The Burntwood region of Manitoba accounted for approximately one-third of the fatalities but only has 10% of Manitoba's population. Many snowmobiles in the Burntwood region are not required to be registered therefore a correlation between the numbers of machines and the numbers of fatalities cannot be accurately determined. Also, this region likely has higher travel usage than southern regions, a greater number of machines used for utility purposes versus recreational use, a higher incidence of young operators and limited helmet use given the exemption from mandatory helmet use in remote areas. Taken into consideration, these factors could contribute to a higher percentage of fatalities for this region.

A further analysis of fatal snowmobile crashes between 1991 and 2001 demonstrates that Manitoba has the highest average fatality rate per registered snowmobile with 3.9 fatalities per 10,000 registrations compared to Saskatchewan 3.48, New Brunswick 3.39, Quebec 1.88 and Alberta 1.67. This analysis may be skewed because the seasonal use of

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[6] Statistics Canada, Population by Year, 2001: Ontario, 11,874,400, Manitoba, 1,150,000

[7] Office of the Chief Medical Examiner, G. Holens, Fatal Snowmobile Accidents in Manitoba, 1999/92 - 2000/01 (Appendix E)

[8] Snoman Inc. Snoman Regions (Appendix F)

each snowmobile is not measured and the total number of snowmobiles accounted for may not reflect the total number of machines in use as each province differs in its criteria for the mandatory registration of snowmobiles.

Between the winters of 1998 and 2000/2001 fatal collision rates in Manitoba remained steady at 0.7/1,000 registered snowmobiles, while snowmobile injury collision rates fluctuated. Injury collision rates decreased from 2.6/1,000 registered snowmobiles in 1998/1999 to 2.0/1 in 1999/2000, and then increased in 2000/2001 by 45% from 2.0 to 2.9/1,000 registered snowmobiles[9].

According to the statistics gathered by the DDVL for the annual compilation of the Traffic Collision Statistics Report (1999/00 and 2000/01), driver error or misjudgment was reported for 75.0% of total operators involved in fatal snowmobile collisions. "Drive too fast for conditions" (66%), "lost control/drive off road" (20.0%), "unsafe operating speed" (7.0%) and "careless driving" (7.0%) were the most common reported driving infractions[10]. Eighty percent of snowmobile operators involved in fatal collisions were suspected of drinking or being impaired at the time of collision occurrence. Reports indicate that both alcohol and speed were contributing factors in 42% of fatal snowmobile collisions while adverse environmental conditions (weather, snowdrifts and slippery road surface) were factors in half of the fatal collisions.

Snowmobile collisions, both fatal and injury related, are twice as likely to occur on weekends (68%) than during the week (32%). The highest incidence of fatal and injury collisions (72.8%) occurred between 12:00 noon to midnight; more than half of fatal snowmobile collisions occurred under "dusk" or "dark" light conditions while an equal amount of injury collisions occurred under "day" and "dark" conditions. A third of snowmobile fatal collisions happened on public roadways. Almost 42% occurred on a river or lake, while 16% occurred on marked, groomed or bush trails.

2.5 Demographics of Snowmobile Crash Victims

During this reporting period, 1998 to 2001, the demographics of fatal crash victims indicate that 85% of victims were male. First Nations peoples accounted for 42% of all snowmobile fatalities. The age groups between 20-34 had the highest number of injured victims while the younger age group, 15-19, incurred the largest number of fatalities.

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[9] Transportation and Government Services, Division of Driver and Vehicle Licencing: Statistics are gathered from a number of sources including information from traffic accident reports filed by police, the annual Off Road Vehicle Report, the annual Traffic Collision Statistics Report, Section 11-Off Road Vehicle Collisions and Traffic Accident Fatalities, including preliminary data for 2000 (unpublished) compiled by the Department (Appendix G)

[10] "Drive too fast for conditions" refers to a driver operating the vehicle at a speed in excess of the maximum posted speed while "unsafe operating speed" refers to a driver operating a vehicle above the posted limit thereby posing a hazard to other road users or operating a vehicle so slowly as to impede the movement of traffic within posted speed limits.

Sixty-nine percent of operators involved in fatal and injury snowmobile collisions maintained an active driver's licence at the time of collision occurrence.

2.6 Health Care Costs

There were 1509 persons hospitalized due to injuries that were directly attributable to snowmobile crashes between 1990 and 1999[11]. The average duration of hospitalization was 6.6 days for a total of 9,959 days. Again, males accounted for the greatest percentage of victims (75.8%) while injured First Nations peoples accounted for 73.4% of the over-all total. The average hospital stay for each of the injured First Nations victims was 5.83 days; the average for non-First Nations individuals was 6.88 days. The difference in the length of hospitalization is attributed to the lower average age of First Nations victims.

The average cost for hospitalization is approximately one thousand dollars ($1000.00) per day for a total cost of approximately ten million dollars ($10,000,000) between 1990 and 1999. Eighty-one percent (81%) of the total cost can be attributed to injuries sustained by males.

2.7 Helmet Usage

Helmet use was also considered by the Working Group. Based on the data provided by the Office of the Chief Medical Examiner, the failure to use a helmet as a contributing factor to snowmobile related fatalities is inconclusive as 47% of persons who suffered a fatal snowmobile crash were wearing a helmet at the time of the incident. It was noted, though, that while a helmet may have been employed at the time of the incident there was no determination as to the proper use of the helmet. For example, in many instances the helmet is worn but not securely fastened. There are many research studies available, however, that support the view that helmet use can help reduce head trauma and reduce fatalities and serious injury. Also, the cost of a helmet relative to the cost of a snowmobile is insignificant but can potentially provide a life-saving benefit making helmet use a cost effective safety measure.

Currently there are several exemptions under the ORVA respecting mandatory helmet use. The exemptions include: operators employed in farming, commercial fishing, hunting and trapping operations; an operator of a snowmobile that is being operated in a remote community; an operator who is engaged in the enforcement of *The Wildlife Act* and regulations or the *Fisheries Act* and regulations; and, an operator who is an employee of Manitoba Hydro and fulfilling his or her duties as an employee, north of the 53rd parallel and between the months of May and October. Although helmet use is not mandatory for the employees of some agencies, it is common practice to have an internal

[11] Transportation and Government Services, Division of Driver and Vehicle Licencing: compilation of data using Manitoba Health statistics between 1990 and 1999 (Appendix H)

policy establishing mandatory helmet use. For example, Conservation's policy requires that its officers wear helmets when operating an ORV.

The Working Group determined that the benefits of mandatory helmet use outweigh any inconvenience for operators. In order to increase the use of helmets it was recognized that a concerted public awareness campaign would be necessary. An effective public awareness campaign, coupled with the elimination of the provisions for exemptions from helmet use under the ORVA, could significantly reduce fatalities and injuries in all regions of Manitoba.

3. Enforcement Issues

Enforcement issues were identified as: the need to enhance the ability of enforcement officers to identify vehicles and owner/operators, the ability to lay charges for imprudent operation of snowmobiles, and designation of appropriate speed limits. The challenges faced by enforcement officers are also compounded by the fact that snowmobiles can travel beyond the limits of roadways and established trails and at high speeds.

3.1 Identification Systems

Until the introduction of the ORVA in 1988, snowmobiles were issued two identification decals in addition to a licence plate. Since the discontinuance of the mandatory requirement for decals, law enforcement officials have voiced their concerns regarding their inability to properly identify registered owners in the field, as the licence plate is seldom visible. Spraying snow or the operator's footwear can easily obscure the plate. The Working Group determined that an appropriate identification system is paramount for law enforcement and apprehension.

The Working Group considered two options for snowmobile identification systems based on the premise that decals would enhance visual identification for enforcement purposes:

The first option was to reintroduce decals and eliminate the use of licence plates for snowmobiles. This option would require amendments to the ORVA as well as regulatory amendments. Modifications to the Autopac On-Line System (AOL) would be required in order to issue unique decal numbers for snowmobiles and to differentiate from other ORV that require plates.

The disadvantages of this system vary, from the high costs associated with the changes required for the AOL, to the number of legislative amendments required, to the inability to cross-reference decal numbers with plate numbers, and to the loss of a convenient location to affix validation and SnoPass stickers. The advantages of this proposal include a cost saving for the government due to the reduction in the number of plates issued and the conversion to owner-supplied decals. The current vehicle status screens and a system

whereby plates (decals) are associated with owners would be compatible with the proposal.

The second option was to reintroduce decals and retain licence plates for snowmobiles. This option requires amendments to the ORVA. Regulatory amendments would include the requirement for decals, including placement and standards. The advantages of this proposal include the fact that no system changes are required for AOL or the registration process. Maintaining a licence plate, which currently follows the owner, would also facilitate the removal of decals upon the sale of a vehicle as the decal serial numbers and letters would match the plate numbers and letters. Cross-reference opportunities exist with the use of both a plate and decals and no changes to DDVL vehicle status screens, which are accessed by law enforcement agencies, are required. Owner supplied decals make this a relatively low cost initiative for government.

In order to facilitate the use of decaling on snowmobiles, the International Association of Snowmobile Administrators has requested that manufacturers of snowmobiles change their design to accommodate the placement of decals on cowlings by the year 2004. This manufacturing accommodation would further enhance this option.

Option 2 was adopted by the Working Group as the most effective and efficient means to improve snowmobile identification. The Working Group determined that decal numbers and/or letters should be a minimum of 7 cm in height and placement should be on ach side of the snowmobile cowling, above or below the bumper line and must be clearly visible. Decals should also be of a colour contrasting to the colour of the snowmobile. While reflectivity could further enhance the visibility of the decal there may be issues such as availability, increased cost, durability and ease of removal associated with this material.

Linked to the issue of the inability of enforcement officers to identify snowmobiles in the field is the issue of registration. Manitoba legislation provides for exemptions from the mandatory registration and insurance of snowmobiles under a variety of circumstances. It is estimated that approximately 28.3% of all existing snowmobiles in Manitoba are not registered. Again, if an officer is unable to identify an operator or owner of a snowmobile their ability to enforce provisions under the legislation is significantly reduced. For example, if a snowmobile that is normally operated on private land only, which does not require registration, is operated off the private land enforcement officers very likely would not be able to identify the vehicle should the need arise.

The Working Group recognizes that both the introduction of decals for snowmobile identification and the elimination of most of the provisions for exemptions from mandatory registration may not be readily accepted by the snowmobiling public. Concerns such as increased costs, potential damage to snowmobiles upon the removal of decals, and government intrusion on matters of personal property could be voiced in opposition to these measures. In anticipation and response to these concerns the Working Group determined the costs of a pair of basic decals, which are available at various Manitoba outlets, would be approximately twenty dollars ($20.00) which is minimal

compared to the overall cost of a snowmobile. Manitoba Conservation has done field-testing on the application and removal of decals and reports that any damage that may occur during removal of a decal is negligible. Finally, the benefits of mandatory registration in terms of a greater ability to identify and retrieve stolen vehicles, more complete collection of snowmobile related data, and enhanced enforcement outweigh the inconvenience of mandatory registration. This would be especially true if insurance requirements were waived under certain circumstances. Despite recognition of the potential for some initial negative feedback, the Working Group believes that both measures are necessary in order to enhance public safety.

3.2 Driving Infractions

A driver of an ORV is subject to the same Criminal Code of Canada sanctions as a motor vehicle driver. Under section 249 (1) of the Criminal Code an officer can lay a charge of "dangerous operation of a motor vehicle" which is reserved for incidents of a serious nature, such as one that results in the death of an individual. With regard to Provincial sanctions, effective December 1, 1999, a person convicted of an alcohol-related offence (e.g. over .08 BAC or refusing a breathalyzer) is subject to the same penalties as the driver of a motor vehicle. If a driver of an ORV or motor vehicle is convicted of over .08 BAC, he/she will be suspended/disqualified from operating a motor vehicle and an ORV for one year if it is a first offence; and if convicted of refusing a breathalyzer, will be suspended/disqualified from operating a motor vehicle and an ORV for two years if it is a first offence.

Under the ORVA, there is a provision for charging the operator of a snowmobile under section 31, *Careless Operation*: *No person shall operate an ORV in a careless manner or without due care and attention; or without reasonable consideration for other persons and property or in a manner likely to cause damage or injury to other persons and property*. Under the *Highway Traffic Act* (HTA) there is a provision under section 188 (1) to charge an operator of a vehicle who is driving without due care and attention or without reasonable consideration for other persons using the highway (drive carelessly). Also, under section 95(3) an officer can charge an operator of a vehicle who fails to drive at a reasonable and prudent speed or manner given the conditions and regard for the actual and potential hazards that exist (drive imprudently). Both "drive carelessly" and "drive imprudently" can be applied if the snowmobile is being operated on a highway or a highway right-of-way.

As cited previously, "drive too fast for conditions" (66%), "lost control/drive off road" (20.0%), "unsafe operating speed" (7.0%) and "careless driving" (7.0%) were the most common reported driving infractions related to snowmobile accidents. Mirroring the ORV to the HTA through the inclusion of a "drive imprudently" provision was deemed by the Working Group to be an appropriate step toward enhancing enforcement.

In six other Canadian jurisdictions[12] there is a provision within their legislation for an imprudent driving charge, which can be applied to the operation of a snowmobile and does not require a determination of speeding. Conditions both on and off snowmobile trails are constantly changing due to fluctuations in weather, usage, etc. The inclusion of "drive imprudently" provision in the ORVA would provide more flexibility for enforcement officers in determining the most appropriate charge based on each individual situation. Increased enforcement through the use of "drive imprudently" charges, coupled with public awareness programs, could be an effective tool in the reduction of snowmobile related crashes and fatalities.

3.3 Speed Limits

Currently there are no speed limits under the Off Road Vehicles Act. Operators must comply with all provisions under the HTA while operating on a right-of-way, including posted highway speed limits, but these limits do not extend to snowmobile trails or other offroad sites.

According to the data contained in the Traffic Collision Statistics Report for the period between the winters of 1998 and 2000/2001, approximately two-thirds of fatal snowmobile crashes involved driving too fast for conditions. Based on data compiled by the Chief Medical Examiner's Office related to fatal snowmobile crashes between 1991/92 and 2000/01, in approximately two-thirds of fatal crashes the estimated speed of the snowmobile at the time of impact was in excess of 80 kilometers per hour.

In six other Canadian jurisdictions there are established speed limits for snowmobiles. In Saskatchewan, for example, the maximum speed limit on designated trails and on the shoulder of a highway is 80 km. In Ontario, the maximum speed limit is 50 km on designated trails and on the shoulder of a highway.

The RCMP have implemented a template for gathering and recording information related to snowmobile crashes which should provide a more accurate accounting and assessment of conditions under which snowmobile crashes occur. This information will be used to develop enforcement strategies. Increased public awareness and enforcement of existing snowmobile regulations are currently a priority within rural detachments.

Although there was general consensus within the Working Group that maximum speed limits for snowmobiles should be considered, given the varied terrain and conditions that are site specific, it was determined that local jurisdictions may be the most suitable authority to determine speed limits. Establishing speed limits for snowmobiles would broaden the basis on which enforcement officers can deal with aggressive and reckless snowmobile operation. Further study, however, is required before a determination of an appropriate province wide maximum speed limit could be determined. In the interim, the

[12] Division of Driver and Vehicle Licencing: a review of Canadian jurisdictional practices related to snowmobile operation and speed limits (Appendix I)

ability of enforcement officers to charge operators with imprudent driving would suffice, in the absence of a posted speed limit.

4. Public Education/Awareness

4.1 General

An Insurance Institute for Highway Safety study that examined the effectiveness of education programs found that education and awareness programs must be linked to enforcement and evaluation in order to be effective. Any recommendation for expanding the role of enforcement in the absence of an equally strong recommendation for improving education and public awareness would be unproductive.

Alcohol consumption has been identified as a contributing factor in many snowmobile fatalities and injuries (80% of fatalities and 59% of injuries[13]). The apparent social acceptability of drinking associated with snowmobile operation for some snowmobile operators is a concern and indicates a need for a public awareness campaign targeting the snowmobile community.

The former Department of Highways offered a snowmobile safety correspondence program for several years that was highly successful in terms of the number of participants. In 1987 MPI took over this initiative as part of its safe driver program. The Manitoba Safety Council eventually assumed the training program which was by this time a train-the-trainer program, however it reports that interest has been virtually non-existent over the last several years. Snoman Inc., however, reports that inquiries to their organization indicate a continued interest in snowmobile safety training opportunities.

4.2 Current Public Awareness and Training Programs

Several organizations such as Regional Health Authorities, Manitoba Safety Council, Snoman Inc. and the Canada Safety Council currently provide snowmobile safety public awareness and training programs.

IMPACT reports that some regional health authorities have paramedics providing snowmobile training although their resources are limited in terms of availability and equipment. IMPACT is leading (with the Community Wellness Working Group of the Assembly of Manitoba Chiefs) the process to develop an injury prevention strategy for Manitoba First Nations funded by the First Nations and Inuit Health Branch, Health Canada. Considering the high number of fatalities identified in northern communities and the high incidence of First Nations people (42%) that are victims of fatal snowmobile

[13] Traffic Collision Statistics Report (1999/00 and 2000/01) complied by DDVL (Appendix G).

accidents, this organization should be encouraged to include snowmobile safety as an important issue to be addressed in a health strategy.

The Manitoba Safety Council is a not-for-profit institution that delivers programs to enhance transportation and occupational safety. Although in the past it has not actively marketed its snowmobile-training course, it is able to provide a train-the-trainer program that includes a manual and study guides. Unfortunately, the demand for this program has been non-existent over the last several years. During the current season, however, it has initiated a marketing strategy that has increased interest in the program. At the writing of this report Manitoba Safety Council reports that it trained fifteen instructors in January 2002 and has realized a substantial increase in the sale of its students manuals during this snowmobile season.

Snoman Inc. offers the most comprehensive public awareness and training program in Manitoba. Over the last several years, it has operated a school visitation program, "Sled Smart Safety Awareness Campaign", to promote snowmobile safety among young Manitobans in grades 6 to 9. In their first year of operation they attended approximately 92 schools, approximately 80 schools in the second year, with the delivery of presentations to approximately 12,800 students. This program is offered with the support of the RCMP, who attend the workshops, and the financial support of Manitoba Public Insurance. Its continued success is dependent upon the financial resources available to cover delivery costs.

Snoman also promotes safe riding techniques targeted toward the adult demographic group, using local television media as a delivery method. Snoman anticipates the continuation of this successful collaborative effort.

As part of Snoman Inc.'s mandate it promotes the use of groomed trails as the safest place to ride. In the 2000/01 snowmobiling season 13,000 Snopasses were sold. Of that total 5200 were sold to Winnipeg residents. By region, the passes were issued for: the Burntwood (northern) Region (7%), the Western Region (14%), the Interlake Region ((9%), the Central Region (11%) and the Eastern Region (59%). Snoman has approximately 10,000 kilometers of marked trails. According to statistics provided by the Office of the Chief Medical Examiner for the period between 1991/92 and 2000/01 the vast majority of fatalities occurred on ungroomed trails (73%) while groomed trails (22%) and unknown locations (5%) made up the balance.

The Canada Safety Council has a computer-based program available called "SnoPro". This is a comprehensive, student directed, computer program with the opportunity to receive a certificate upon the successful completion of the included test. This program could be an effective means of introducing snowmobile safety in rural, remote and First Nations communities through existing public education and continuing education programs and especially to young people, which are identified as a high-risk group in terms of snowmobile accident victims. The broad accessibility to interactive and/or on-line delivery of instructional materials within Manitoba could facilitate a low-cost program initiative.

4.3 Age Appropriate Training and Restrictions

Snowmobiles are increasingly capable of operation at excessive speeds while their design offers little or no protection for the operator. The frequent use of these high-powered machines by young operators was identified by the Working Group as an issue that needs to be addressed through specific training initiatives. In Saskatchewan, Ontario, Quebec and Newfoundland mandatory training is a requirement for all operators under 16 years of age. All of these provinces, with the exception of Newfoundland, have no provision for operators under the age of 12 years.

Not unlike the current requirements for motorized boats, the Working Group recommends that consideration be given for similar legislation regarding the operation of snowmobiles; mandatory training and operator restrictions based on the age of the operator.

The Manitoba Government recently adopted a Graduated Driver Licencing initiative to enhance safety and promote safe driving practices for new drivers. For example, Transportation and Government Services is currently developing a basic skills training program, for motorcycle operators, which will be a pre-requisite for obtaining a learner's permit effective January 2003. A complimentary program or a mandatory certification program related to the operation of an ORV could significantly reduce the potential for fatalities and injuries for young or new drivers.

5. Recommendations

After a careful review of all available statistical data, various reports, and anecdotal evidence, the Working Group formulated a number of recommendations for the Minister's consideration. Legislative amendments, both statutory and regulatory, are required to address certain snowmobile safety issues identified by the Snowmobile Safety Working Group. As the work of the group progressed it became evident that many of the safety issues related to snowmobile operation also apply to other types of ORV. For this reason, the Working Group has made further recommendation to the Minister regarding the continuance and expansion of the mandate of the Snowmobile Safety Working Group.

5.1 Recommendations for Statutory Amendments

The Working Group recommends the timely introduction of legislation to address the need for the following statutory amendments:

1. Identification System for Snowmobiles: A new requirement for snowmobiles to display identification decals on the cowling of the snowmobile, to assist in law enforcement, is recommended. Enforcement officers experience significant difficulty in identifying and apprehending snowmobile operators who violate the

law. There are two primary reasons for this: First and foremost is the ease with which offenders can simply race away across country at high rates of speed. Secondly, the size and placement of the registration plate restricts visibility at all but short distances and is easily covered either by the rider's footwear or the spray of snow. Enhancement of the current identification system (registration plates) would also improve the ability of law enforcement agencies to identify and recover stolen vehicles.

2. Speed Control: It is recommended that there be clear authority for a traffic authority to establish speed limits for snowmobiles (and other ORVs) within their areas of jurisdiction. While traffic authorities have imposed speed limits under bylaw, there is no clear authority to do so.

3. Drive Imprudently Offence: An offence of "drive imprudently" for ORV operators should be included in the ORVA. Law enforcement representatives have indicated that speed limits may be difficult to enforce in certain areas, however, an offence of "drive imprudently" which includes the concept of "driving too fast for conditions" would be an appropriate, enforceable substitute.

4. Elimination of exemptions from helmet use: Although available statistics related to snowmobile fatalities are inconclusive regarding the benefits of helmet use, many studies have demonstrated that helmet use can potentially reduce head trauma and reduce fatalities and serious injury. Again, the benefits of a mandatory helmet requirement for both individuals, and Manitobans as a whole, in terms of a reduction in personal injury and death and the costs associated with accident related healthcare, surpass any inconvenience to snowmobile operators. This recommendation will also require regulatory changes.

5.2 Recommendation for Regulatory Amendment

The following is a regulatory amendment recommended by the Working Group:

1. Elimination of Exemptions From Registration: In order to identify owners of snowmobiles, which would facilitate enforcement of snowmobile related legislation, the Working Group recommends the elimination of most registration exemptions provided in regulation. These include snowmobiles used solely on an owner's property; snowmobiles used by trappers or commercial fishermen for work purposes; and snowmobiles owned by a resident of a remote community for use in that community. The following statutory exemptions will remain: snowmobiles used exclusively on a competition circuit, snowmobiles operated on behalf of the Department of National Defense, snowmobiles owned by, or in possession of, a dealer and bears an ORV dealer's plate, off-road maintenance machines, and, snowmobiles owned by a non-resident who has registered it for the current registration period. The Working Group further recommends that consideration be given to waiving of insurance requirements under some circumstances.

The current combined fees for registration and insurance are $104.00, of which $10.00 is allocated to the registration fee. As snowmobiles that are currently exempt from the registration requirement are not currently insured, there would be no loss of revenue for MPI should the government waive insurance requirements for those snowmobile owners that are currently exempt from registration requirements. Taking into consideration the provisions within the cost-sharing agreement between DDVL and MPI and the additional administrative costs that would be incurred by DDVL, it is anticipated that this would be a revenue-neutral initiative. If insurance requirements were waived, the cost to snowmobile owners would include the $10.00 registration fee and the cost of decals.

The Working Group believes that the benefits of mandatory registration would outweigh any inconvenience to individual owners; theft prevention and enhanced enforcement are two such benefits. A requirement for registration of all snowmobiles would also improve data collection related to the actual numbers of machines in use and the analysis of the relative fatality/accident statistics although the Working Group recognizes that registration itself is not a safety enhancing measure but rather a means to an end. It should also be noted that the support of Snoman for mandatory decals is contingent upon the elimination of all exemptions from mandatory registration.

Prior to the implementation of this recommendation, however, further study should be undertaken regarding the implications for eliminating current exemptions. For example, the Working Group has incomplete information on the impact of the recommendation regarding waiving of insurance requirements for some registrants. Also, although Aboriginal and Northern Affairs was offered the opportunity to provide feedback none was received; the department suggested that First Nations communities be contacted directly in this matter. The desire to forward this report to the Minister in a timely fashion prevented the Working Group from undertaking broader consultations. Further study and consultations with key stakeholders could be undertaken by DDVL, which could report its findings directly to the Minister.

5.3 Recommendations for Public Education and Awareness Initiatives

It is the opinion of the Working Group that public awareness programs and education initiatives are a key component in improving snowmobile safety. The "Sled Smart Program" offered by Snoman Inc. was identified as the only current snowmobile safety awareness program which is directed specifically to school-aged children. This organization also provides a valuable snowmobile safety message through its public media safety campaign that serves a broader audience. The Working Group recommends that Snoman receive continued support for the delivery of these initiatives.

1. The development of safe riding habits and the reduction of health care costs are two benefits that could be realized with the implementation of a snowmobile

safety certification program for snowmobile operators. Accessibility for all Manitobans, regardless of age or location, to high quality, teaching material with the potential to obtain a safety certificate is an attainable objective. Consideration should also be given to the development of a program that would be culturally and environmentally appropriate for delivery in remote and northern communities. The Working Group recommends that the Minister strike a working group with a mandate to investigate and develop a snowmobile safety certification program suitable for delivery within all regions of Manitoba. High-level co-operation between Manitoba Education, Aboriginal and Northern Affairs, MPI, DDVL and the various organizations that currently provide snowmobile safety awareness programs could facilitate the development and delivery of this program.

Further, this new working group should also undertake consideration of mandatory certification and operator restrictions, for certain age groups. The current legislation prohibits the operation of a snowmobile by a person under 14 unless he/she is supervised and accompanied by a parent or person over the age of 18 who is authorized by the parent to provide supervision. Operator restrictions based on the age of the operator of the machine, together with mandatory training, would serve to promote safe operating practices and enhance the safety of children.

As an alternative, if the Snowmobile Safety Working Group is continued as an Off-Road Vehicle Safety Working Group as recommended, this task could be assigned to a sub-committee of the Working Group.

2. The train-the-trainer program available through the Manitoba Safety Council should be promoted and access to this training should be encouraged for government employees currently delivering training services throughout Manitoba. For example, the existing government service delivery infrastructure includes agricultural representatives who provide training programs to the rural community on an on-going basis. A program similar to the existing Driver Training program offered in Manitoba high schools may also be an effective means of delivering a mandatory snowmobile operator's certificate program.

3. The Government of Manitoba has placed a strong emphasis on reducing the incidence of drinking and driving. Public awareness campaigns should be expanded to include the negative outcomes of operating a snowmobile under the influence of alcohol and to counter the apparent social acceptability, within some snowmobile operator groups, of drinking and operating a snowmobile.

4. A public awareness campaign should be undertaken to promote the use of helmets for operators and passengers on snowmobiles. The Working Group believes that there should be an emphasis on the recreational benefits of family snowmobile activities with a focus on the safety of children.

5.4 Recommendation for Continuance of the Working Group

During the course of its review and discussions of measures that could enhance safety for snowmobiles, the group recognized that many safety concerns associated with snowmobiles also apply to other types of off-road vehicles. The Snowmobile Safety Working Group recommends that its work be continued and that the scope of its mandate broadened to include all off-road vehicles. Re-constitution of the Working Group may be necessary in order to include organizations that are more specific to other types of ORV.

6. Appendices

Appendix A: Snowmobile Safety Working Group, List of Participants
Appendix B: Snowmobile Safety Working Group Terms of Reference
Appendix C: Snowmobiles Registered in Regional Health Authorities
Appendix D: Survey of Selected Canadian Jurisdictions Snowmobile Regulation Practices and Snowmobile Registration Exemptions in Selected Canadian Jurisdictions
Appendix E: Fatal Snowmobile Accidents, Manitoba 1991/92 - 2000/01
Appendix F: Manitoba Snowmobile Fatalities by Snoman Inc. Regions (1991-2000)
Appendix G: Traffic Collision Statistics (1998 - 2001)
Appendix H: Health Care Costs Associated with Snowmobile Accidents (1990-1999)
Appendix I: Survey of Selected Canadian Jurisdictions Related to Snowmobile Operation and Speed Limits

Appendices

Manitoba
Transportation and
Government Services

Transports et
Services gouvernementaux
Manitoba

Appendix A

Snowmobile Safety Working Group

List of Participants

Manitoba
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Manitoba

SNOWMOBILE SAFETY WORKING GROUP

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Revised February 18, 2002

Appendix B

Terms of Reference

Manitoba
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Manitoba

TERMS OF REFERENCE

SNOWMOBILE SAFETY WORKING GROUP

1. **PURPOSE:**

This sets out the Terms of Reference for the Snowmobile Safety Working Group, which was established by the Department of Transportation in May 2001.

2. **CONTEXT:**

The 2000-01 snowmobile season had a relatively high number of snowmobile related fatalities. The Minister of Transportation and Government Services is responsible for legislation governing the operation of off-road vehicles including snowmobiles under *The Off-Road Vehicle Act*. In response to the past season's fatalities, the Minister established a Snowmobile Safety Working Group to review the matter.

3. **MANDATE:**

In an effort to reduce snowmobile deaths and injuries in Manitoba, the Snowmobile Safety Working Group will:

- research accident information,
- provide opportunities for input from other interested parties on safety perspectives,
- identify underlying snowmobile safety issues,
- develop new safety initiatives and directions, and
- make recommendations.

4. **SCOPE:**

The Working Group will consider various aspects aimed at strengthening snowmobile safety including:

i) Legislation
ii) Enforcement
iii) Public Education/Awareness.

. . . /2

5. ROLES AND RESPONSIBILITIES:

The Department of Transportation will spearhead the Working Group and prepare a report for the Minister based on the Working Group's discussions and recommendations.

Various Government Departments and the RCMP will contribute snowmobile accident statistics and information to aid the Committee in problem identification.

The Working Group recommendations are to be provided as advice to the Minister for his consideration. Participants will ensure the Working Group's deliberations are kept confidential.

6. MEMBERSHIP:

The Working Group will comprise Provincial officials from the Department of Transportation, Department of Conservation, and the Chief Medical Examiner's Office. Other participants will include Snoman, the RCMP, MPIC, Manitoba Safety Council, and IMPACT. A list of the participants is attached.

7. RESOURCES:

No financial resources are available.

Secretarial support services will be provided by the Department of Transportation and Government Services.

8. DELIVERABLES:

A report will be prepared for the Minister's consideration based on the Working Group's deliberations by Fall 2001. The report will identify issues and possible safety measures for implementation for next winter. Any legislative amendments will be identified for Government consideration for the Fall 2001 Session of the Legislature.

Appendix C

Snowmobiles Registered By Regional Health Authorities

Manitoba
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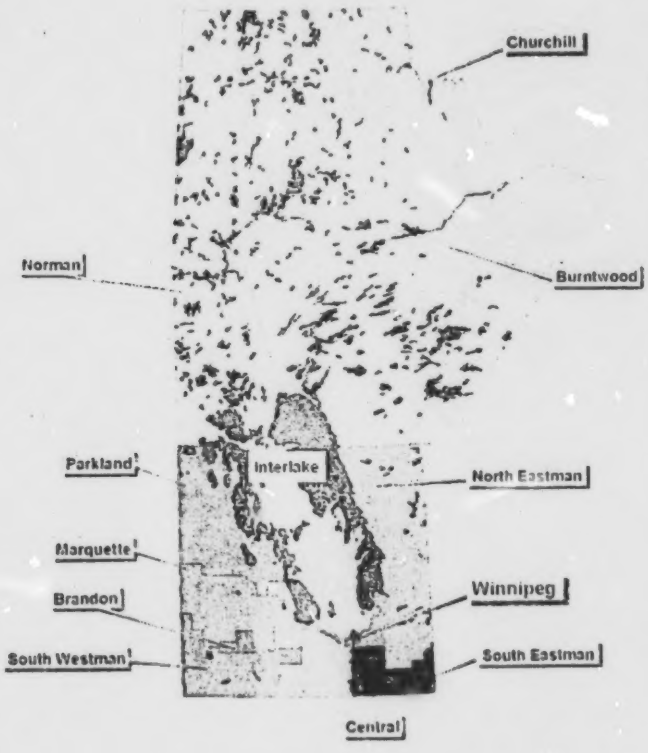
Snowmobiles Registered in Regional Health Authorities (As at March 1, 2001)

Region (population*)	% Total Pop.	# Registered	% Registered
Brandon (46,888)	4.10%	579	2.69%
Burntwood (44,477)	3.89%	951	4.43%
Central (96,678)	8.46 %	2,858	13.30 %
Churchill (1,049)	0.09 %	1	0.00 %
Interlake (74,396)	6.51 %	2,640	12.28 %
Marquette (37,719)	3.30 %	1,065	4.96 %
Norman (25,321)	2.22 %	1,055	4.91 %
North Eastman (38,621)	3.38 %	2,273	10.58 %
Parkland (43,506)	3.81 %	1,330	6.19 %
South Eastman (52,384)	4.59 %	1,688	7.85 %
South Westman (34,693)	3.04 %	954	4.44 %
Winnipeg (646,733)	56.61 %	6,006	27.95 %
Unknown	N/A	91	0.42 %
Total	100 %	21,491	100 %

** population figures provided by RHA as at 1998



Regional Health Authorities

Appendix D

Survey of Selected Canadian Jurisdiction's Snowmobile Regulation Practices

Snowmobile Registration Exemptions and Mandatory Training Programs in Selected Canadian Jurisdictions

June 28, 2001

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Survey of Selected Canadian Jurisdiction's Snowmobile Regulation Practices

	BC	AB	SK	MB	ON	QB	NB	NS	PEI	NF	YK	NWT	NV
Registration, insurance, licensing, training, liability													
Registration/permit requirement	√	√	√	√	√	√	√	√	√	√	√	√	√
Requirement to produce registration	√	√	√	√	√		√	√	√		√	√	√
Exemption for snowmobile operated on private land		√	√	√	√		√	√	√	√	√		
Exemption for non-residents	√	√	√	√	√		√		√	√	√		
Exemption for special events of limited duration							√						
Exemption by regulation/HTB order/registrar		√	√	√						√		√	√
Insurance requirement		√		√	√	√	√			√	√	√	√
Requirement to furnish proof of financial responsibility		√	√	√	√		√			√	√	√	√
Licence requirement (off-road)			√		√								
Requirement to produce licence (off-road)			√		√								
Licence requirement (on, across or on a highway shoulder)	√		√	√	√						√		
Req'mt to produce licence (on, across or on hwy shoulder)			√	√	√						√	√	√
Minimum operator age (on, across or on hwy shoulder)		14		16	16		14	16		16	16	16	16
Minimum independent operator age (off-road)		14	16	14	12	14	14	10		13			
Minimum supervised operator age			12		N/A	N/A							
Maximum distance from supervised operator			√										
Limit of one supervised operator per supervisor			√										
Youthful operator training/insurance requirement			√		√	√				√			
Supervisor legally liable for youthful operator			√										
Owner legally liable to same extent as consensual operator	√		√		√								
Restrictions re: number of passengers				√							√	√	√
System of local reg'n, licensing, testing, insurance, etc.					√							√	√
Equipment requirements													
Headlight/taillight requirement		√		√			√						
Head/tail lights after dark/where visibility warrants	√	√	√	√	√			√		√	√	√	√
Equipment prescribed by regulation	√		√							√	√		
Equipped & maintained so as not to endanger safety												√	√
Helmet requirement			√	√	√		√	√			√		
Seat belt requirement (if assembly provided)				√									
Rigid tow bar; not >1- 3 metres from snowmobile		√	√	√	√								
Adequate exhaust		√		√			√						

Survey of Selected Canadian Jurisdiction's Snowmobile Regulation Practices

	BC	AB	SK	MB	ON	QB	NB	NS	PEI	NF	YK	NWT	NV
Brake requirement										√	√	√	√
Amber reflectors(s) at vehicle front/red reflector(s) at rear				√			√			√			
Noise muffler				√	√		√			√			
No modifications to required components after m'fr					√								
Exemption for organized competitive/racing events	√				√								
Peace officer may remove from hwy until rendered safe											√		
Operating restrictions/rules of the road													
Maximum speed (designated trails)			Posted		50 k/h								
Maximum speed (off-road)			80 k/h										
Maximum speed (on the shoulder of a highway)			80k/h		50 k/h							50 k/h	50 k/h
Reasonable safe speed for terrain & conditions			√		√			√			√		
Minister/Cabinet/HTB/municipality may set speed limit		√	√		√						√	√	√
Use due care & attention; reasonable consideration	√	√	√	√	√		√	√	√	√			
Don't harass, chase, injure or kill wildlife	√			√				√		√			
Not under the influence of intoxicating substances										√			
Follow at a reasonable, prudent distance			√		√						√		
Keep to the right			√	√	√							√	√
Yield right-of-way			√	√	√								
Keep clear of other vehicles when overtaking			√		√							√	√
General highway prohibition	√	√	√	√	√		√	√	√	√			
Highway prohibition outside municipalities/regulated areas												√	√
Conditional use on seasonal ice- or snow-packed roads				√								√	√
Prohibition re: boulevard or median of a divided highway		√		√				√			√		
Prohibition re: railway tracks	√									√			
HTB &/or municipal authority to regulate highway use	√	√	√	√			√			√		√	√
Stop snowmobile before entering highway/railway		√	√	√	√			√	√	√	√	√	√
Passengers disembark before highway crossing		√	√	√				√	√			√	√
Yield right-of-way to other highway users		√	√		√			√	√	√		√	√
Cross via shortest, most direct route at right angles		√	√	√	√			√	√			√	√
Cross at point of clear visibility in both directions				√				√		√		√	√
Multiple operators to proceed in a single file				√							√	√	√

Survey of Selected Canadian Jurisdiction's Snowmobile Regulation Practices

	BC	AB	SK	MB	ON	QB	NB	NS	PEI	NF	YK	NWT	NV
Same direction as vehicular traffic within 30 metres of hwy			√	√				√					
Obey all traffic control devices		√	√	√	√				√		√		
Obey peace/conservation officer's signal/direction				√	√		√			√	√		
Stop at peace/conservation officer's/land owner's request	√	√		√	√		√	√			√		
Owner vicariously liable for operators' offences		√	√	√	√			√	√				
Miscellaneous													
Snowmobile dealers/rental agencies to maintain records			√				√			√			
Dealer bond/insurance required for rental purposes	√	√								√			
Dealer to register snowmobile on purchaser's behalf					√								
System of designated/managed/prescribed trails			√	√	√		√		√				
Snowmobile club officer may be auxiliary peace officer									√				
Prohibition on private land without owner/occupier consent	√		√	√				√					
Implied consent for occupier's liability purposes			X										
Occupier's liability legally circumscribed			√		√		√						
Remain at/return to accident scene & render assistance		√	√	√			√		√	√			
Provide particulars to others sustaining injury or loss	√	√	√	√			√		√	√			
Duty to report fatal, injury & serious accidents	√	√		√	√		√		√	√	√	√	√
Garages & repair shops to report serious accidents										√			
Power to detain snowmobile involved in offence/accident		√		√	√		√	√		√	√	√	√
Municipality may regulate, govern or prohibit use	√			√	√		√				√	√	√
Contravention may result in reg'n suspension/ cancellation		√		√			√			√			
Contravention may result in 3 month insurance suspension	√												
Contravention may result in licence suspension					√								
Registrar to receive & maintain record of convictions							√			√		√	√

Note: √ = Yes, X = No

CAUTIONS:

1. The preceding summary was based on a quick, cursory reading of each jurisdiction's equivalent of *The Off-Road Vehicles Act*, (and Regulations, where available on-line) with the exception of Quebec.
2. No attempt was made to research each jurisdiction's equivalent of *The Crown Lands Act*, *The Highway Traffic Act*, *The Motor Vehicles Act* and/or *The Manitoba Public Insurance Corporation Act*.
3. Blank cells in the table indicate that no provisions on this subject were found in the statutes consulted to date.

SNOWMOBILE REGISTRATION EXEMPTIONS* IN SELECTED CANADIAN JURISDICTIONS

Alberta

- Operation exclusively on private land of owner/operator or private land of another person with that person's express or implied consent
- Operation by a non-resident for 30 days or less, if the snowmobile is validly registered in the non-resident's home jurisdiction
- Snowmobiles owned and operated by DND
- Snowmobiles owned by trappers and operated solely on a registered trap line and snowmobiles owned by fishermen and operated solely in commercial winter fishing operations within a defined geographic territory are exempt from insurance but not registration requirements
- L-G in C may by regulation exempt classes of snowmobiles from any or all of the Act's provisions

Saskatchewan

- Operation exclusively on private land of owner/operator or private land of another person with that person's express or implied consent
- Operation by a non-resident for 90 days or less, if the snowmobile is validly registered in the non-resident's home jurisdiction and the owner can furnish proof of financial responsibility if requested by a peace officer
- Licensed trappers and commercial fisherman while operating on Crown land within the Northern Administration District of Saskatchewan
- The Saskatchewan Highway Traffic Board may by order exempt classes of snowmobiles from registration requirements

Manitoba

- Operation solely on private land occupied by the owner (exempt from both registration and insurance requirements)
- Operation by a non-resident if the snowmobile is validly registered in the non-resident's home jurisdiction and the non-resident does not reside or carry on business in Manitoba for more than three consecutive months in any year
- Snowmobiles owned and operated by DND that are identified as such
- Snowmobiles owned by trappers while used for trapping in a registered trap line district or special trapping area (exempt from both registration and insurance requirements)
- Snowmobiles owned by fishermen while used for commercial fishing (exempt from both registration and insurance requirements).

- Snowmobiles owned by or in the possession of a dealer, for which dealer plates have been issued
- Competition snowmobiles operated exclusively on a competition circuit
- Snowmobiles used exclusively as off-road maintenance machines
- Snowmobiles owned by residents of remote communities while used in a remote community (exempt from both registration and insurance requirements)

The following exemptions are not registration-related, however they may be relevant when analysing injury or fatality rates in particular areas of Manitoba:

- Snowmobile owners/operators are exempt from age restrictions and driver's licence and helmet requirements with respect to operation in remote communities
- Operators are exempt from lamp, helmet and seat belt requirements when enforcing *The Wildlife Act* or the *Fisheries Act* (Canada) in any area other than a highway
- Manitoba Hydro employees are exempt from helmet requirements when operating north of the 53rd parallel between May and October inclusive for the purpose of carrying out employment-related inspections, service, construction or repairs

Ontario

- Snowmobiles driven only on private land owned or occupied by the owner are exempt from registration but not insurance requirements
- Residents of northern Ontario are exempt from paying the $15 annual validation fee
- Aboriginal persons are exempt from paying both the $30 registration fee and the $15 annual validation fee for new or previously unregistered snowmobiles driven only on reserve land
- Snowmobiles owned or leased by the government of Ontario are exempt from paying registration, transfer, annual validation and replacement fees
- L-G in C may by regulation exempt classes of snowmobiles, areas within Ontario and/or classes of persons from any of the Act's provisions

Québec

- Information was not available.

New Brunswick

- Snowmobiles owned by non-residents if the snowmobile is validly registered in the non-resident's home jurisdiction, or if registration is not required in the non-resident's home jurisdiction

- Snowmobiles owned by manufacturers or dealers that are kept for sale and not for renting or leasing and are only operated for demonstration or testing purposes are exempt from registration but not insurance requirements
- Snowmobiles used exclusively in connection with special events of limited duration conducted in accordance with a pre-arranged schedule and with appropriate governmental permission
- L-G in C may by regulation exempt certain types of snowmobiles from the Act's application

* The exemptions described above for each jurisdiction represent exemptions contained in statute as well as in regulation or order. The presence of a regulation-making or order-making power merely indicates that further exemptions could be made without recourse to the legislature of that jurisdiction.

Appendix E

Fatal Snowmobile Accidents
Manitoba
1991/92 – 2000/01

Manitoba
Transportation and
Government Services

Transports et
Services gouvernementaux
Manitoba

FATAL SNOWMOBILE ACCIDENTS

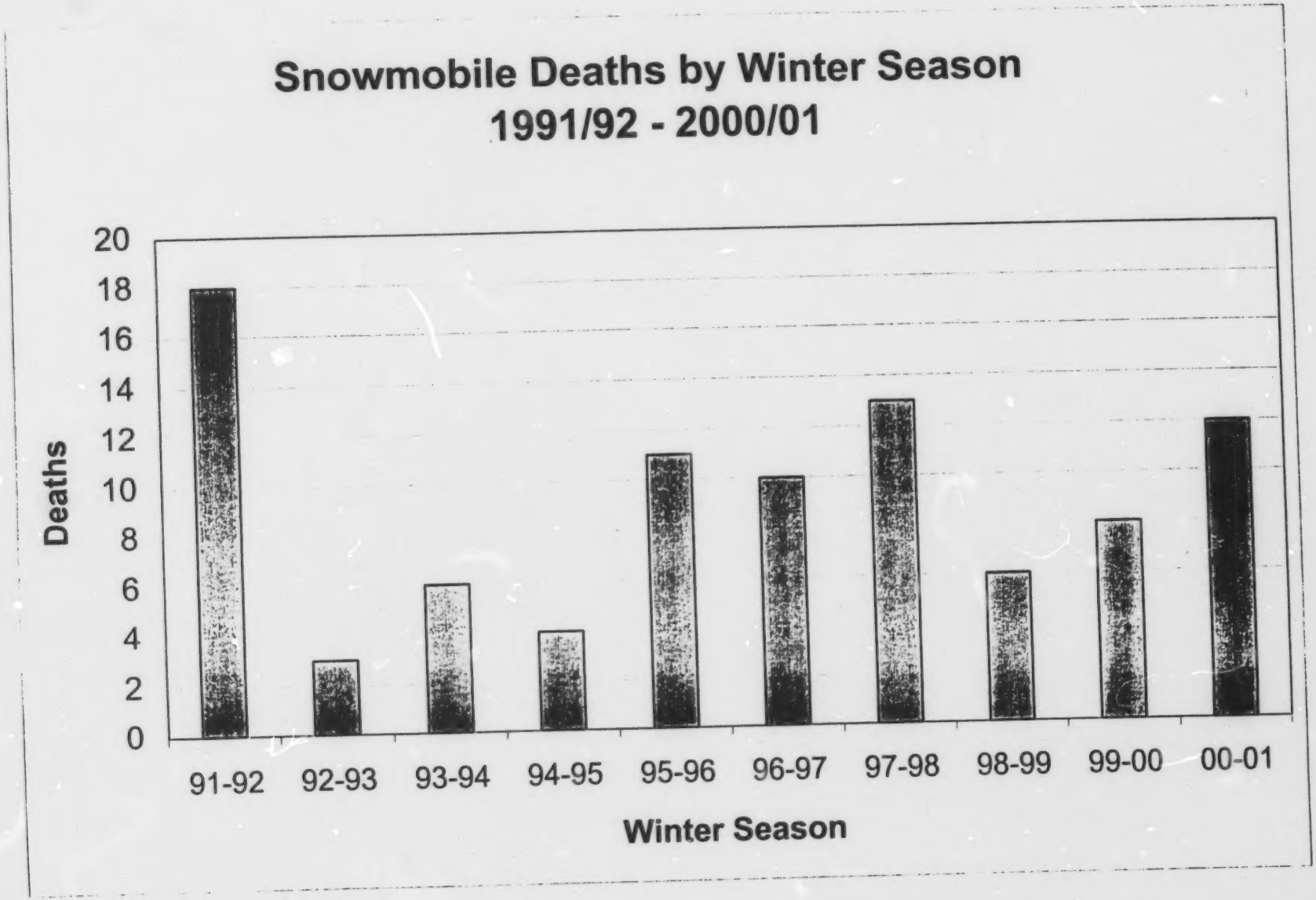
MANITOBA

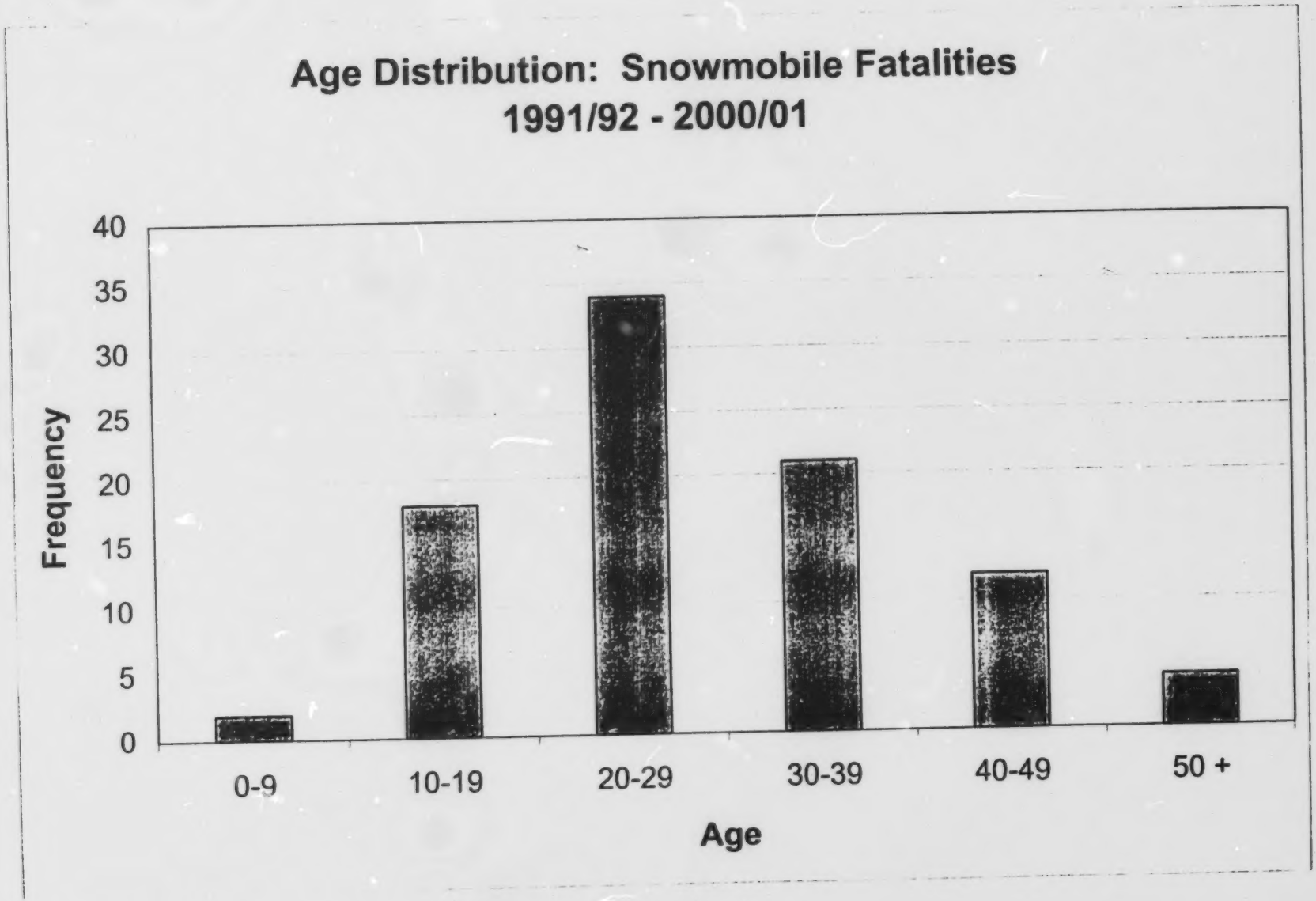
1991/92 - 2000/01

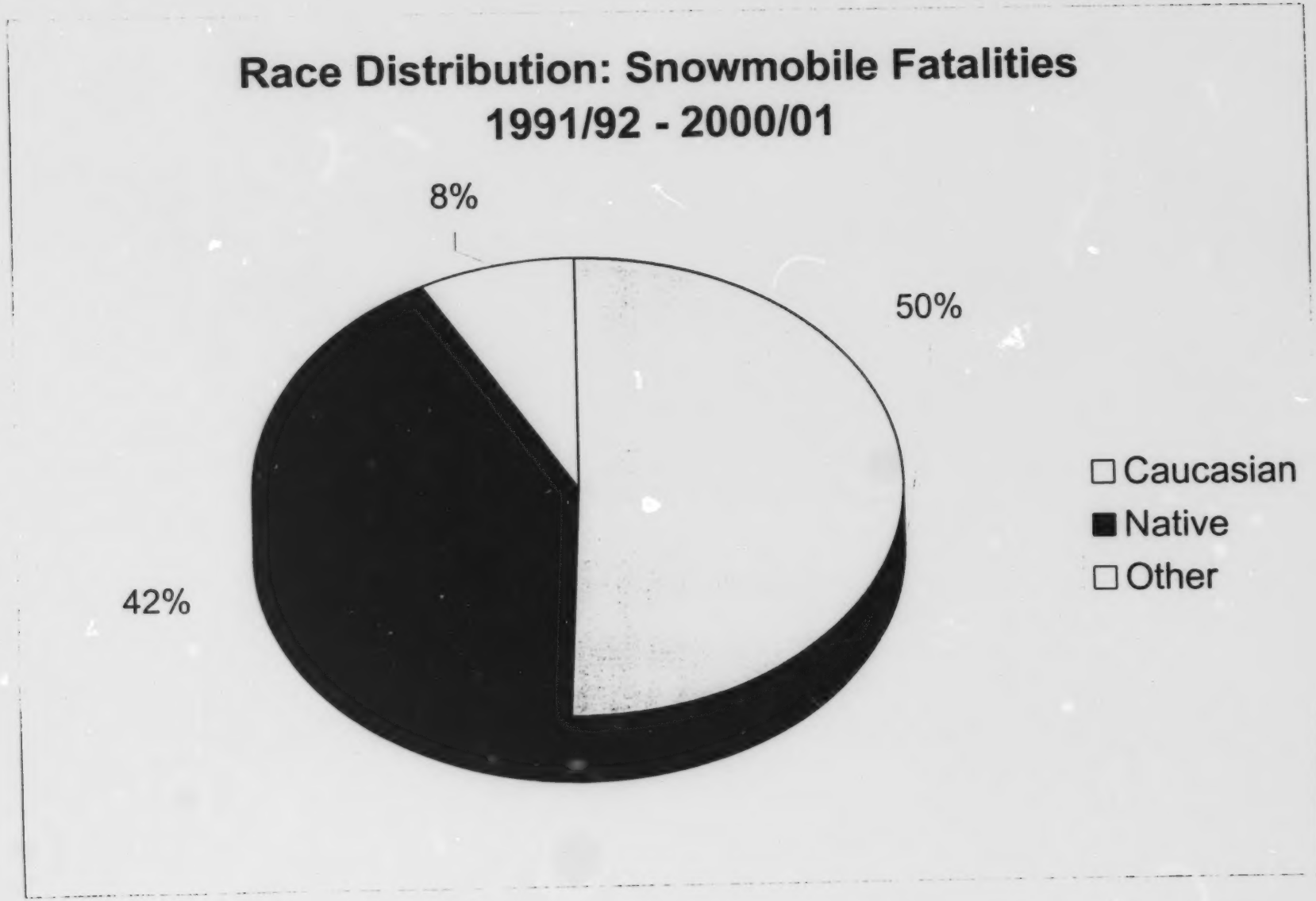
VARIABLES STUDIED

1. Total deaths per winter season.
2. Age
3. Race
4. Purpose of travel
5. Position of victim (passenger, pedestrian, driver)
6. Weather conditions
7. Time of day
8. Month of death
9. Speed at impact

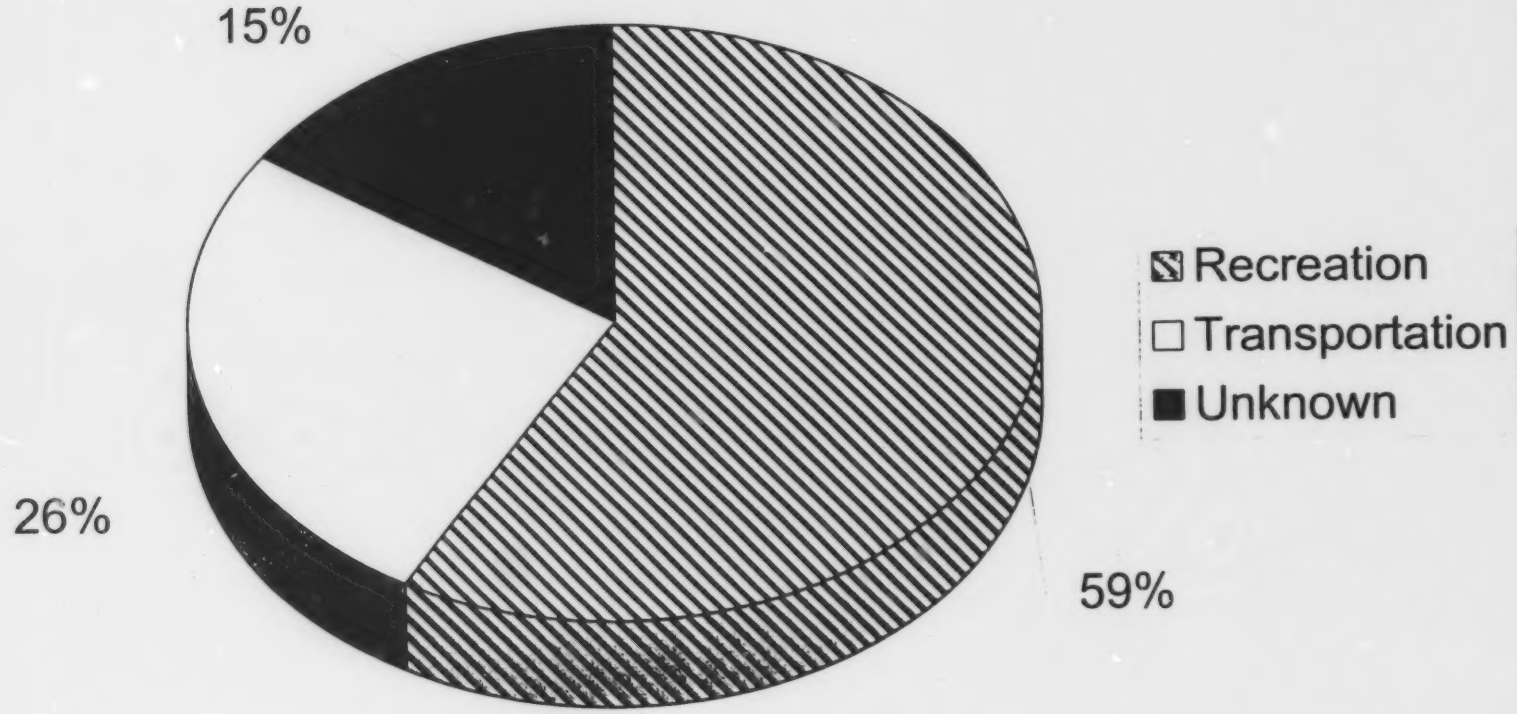
10. Alcohol Readings
11. Driving on-road or off-road
12. Groomed or ungroomed trail
13. Helmet use
14. Cause of Death
15. Deaths by regional health authorities
16. Types of accidents
17. Provincial Comparisons

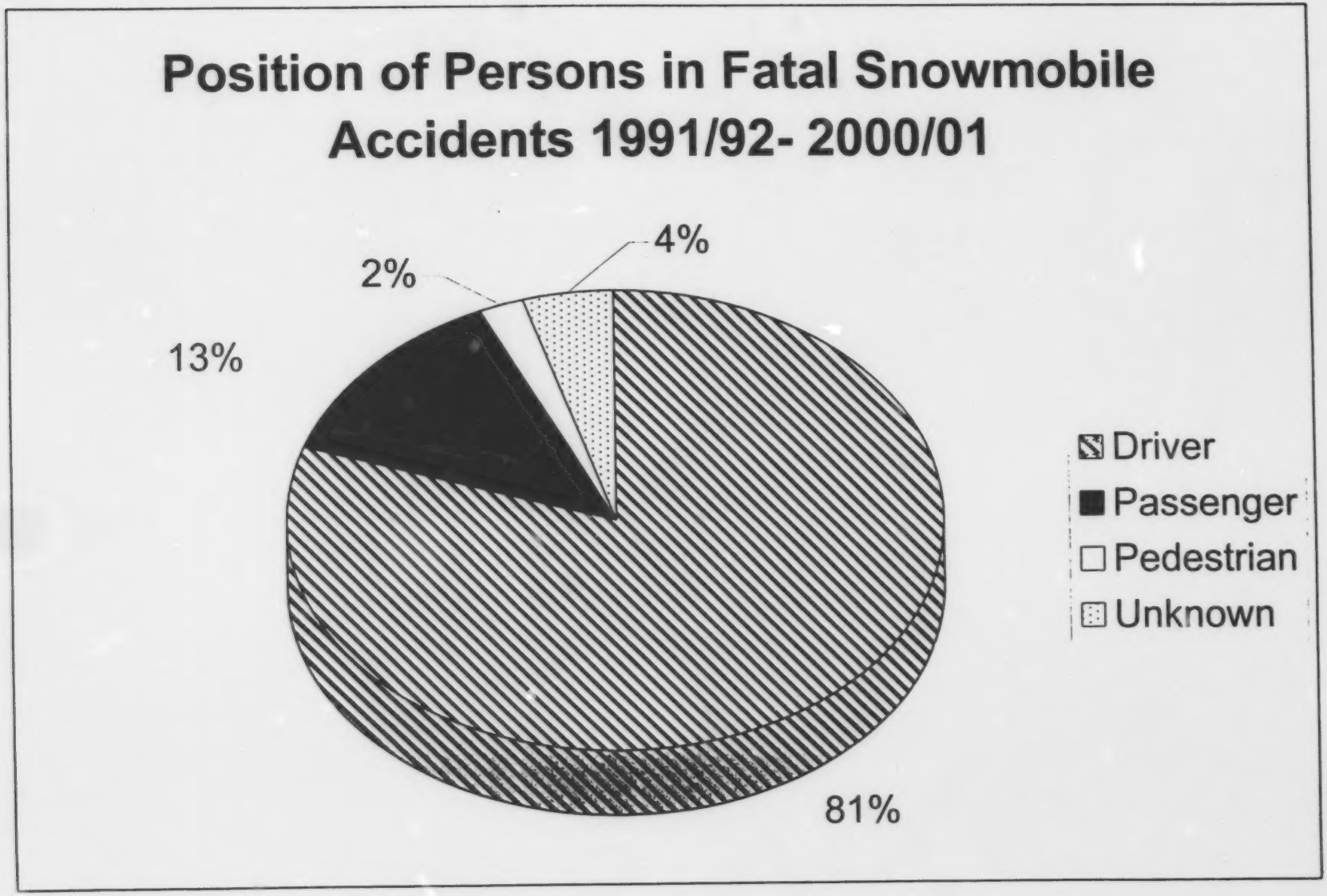

Snowmobile Deaths by Winter Season
1991/92 - 2000/01
Deaths
20
18
16
14
12
10
8
6
4
2
0
91-92
92-93
93-94
94-95
95-96
96-97
97-98
98-99
99-00
00-01
Winter Season


Age Distribution: Snowmobile Fatalities
1991/92 - 2000/01
Frequency
40
35
30
25
20
15
10
5
0
0-9
10-19
20-29
30-39
40-49
50 +
Age

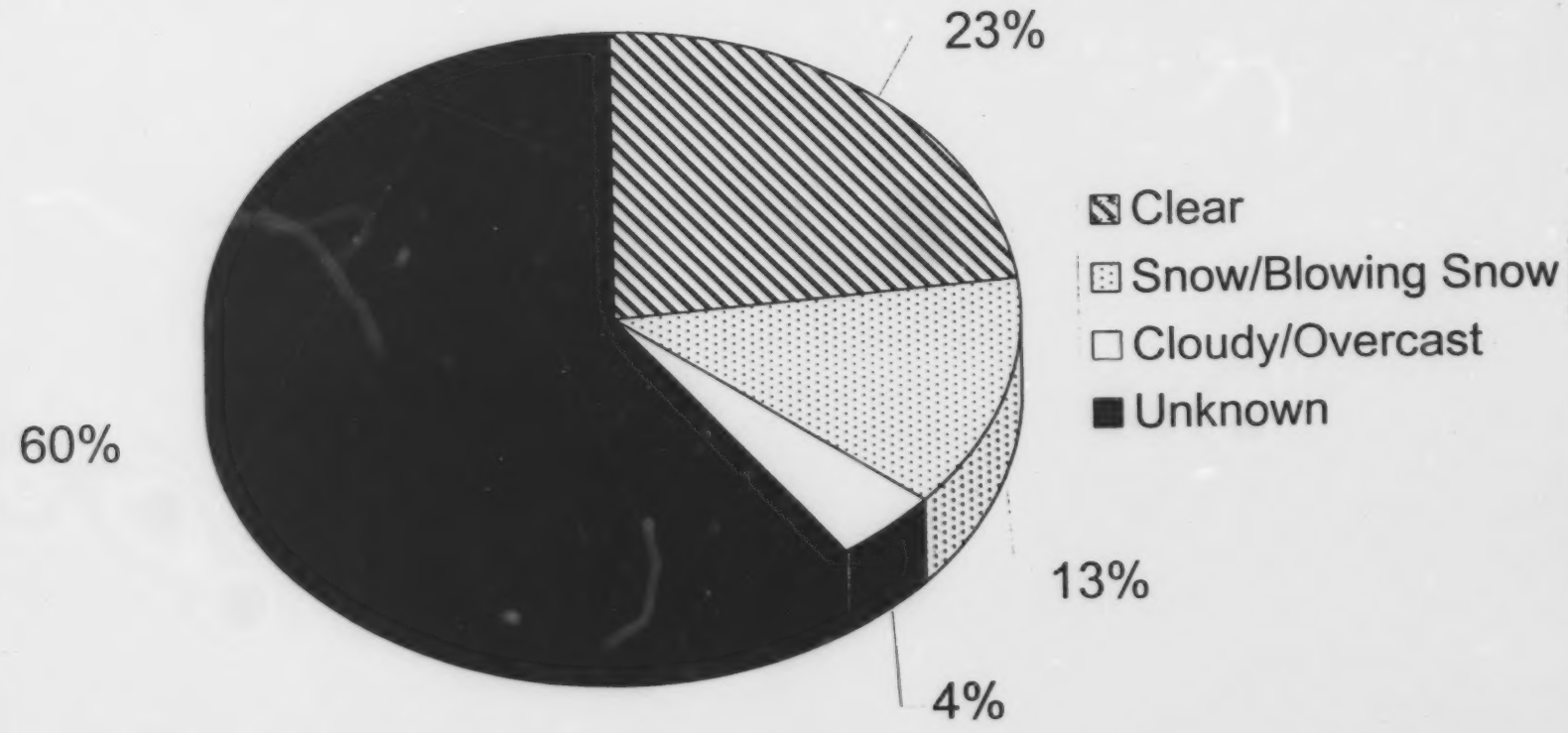

Race Distribution: Snowmobile Fatalities
1991/92 - 2000/01
8%
50%
42%
Caucasian
Native
Other

Purpose of Travel in Fatal Snowmobile Accidents 1991/92 - 2000/01

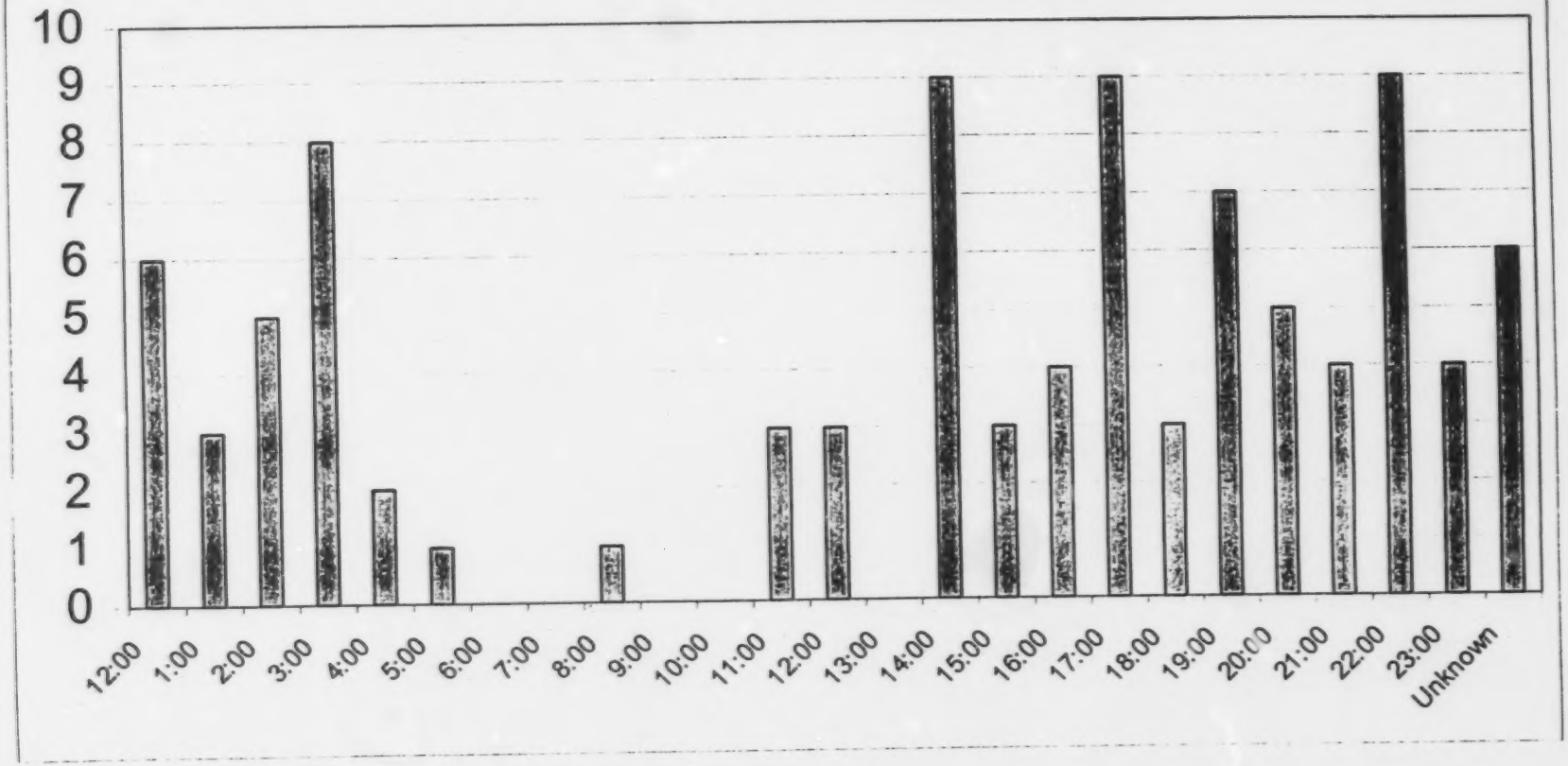


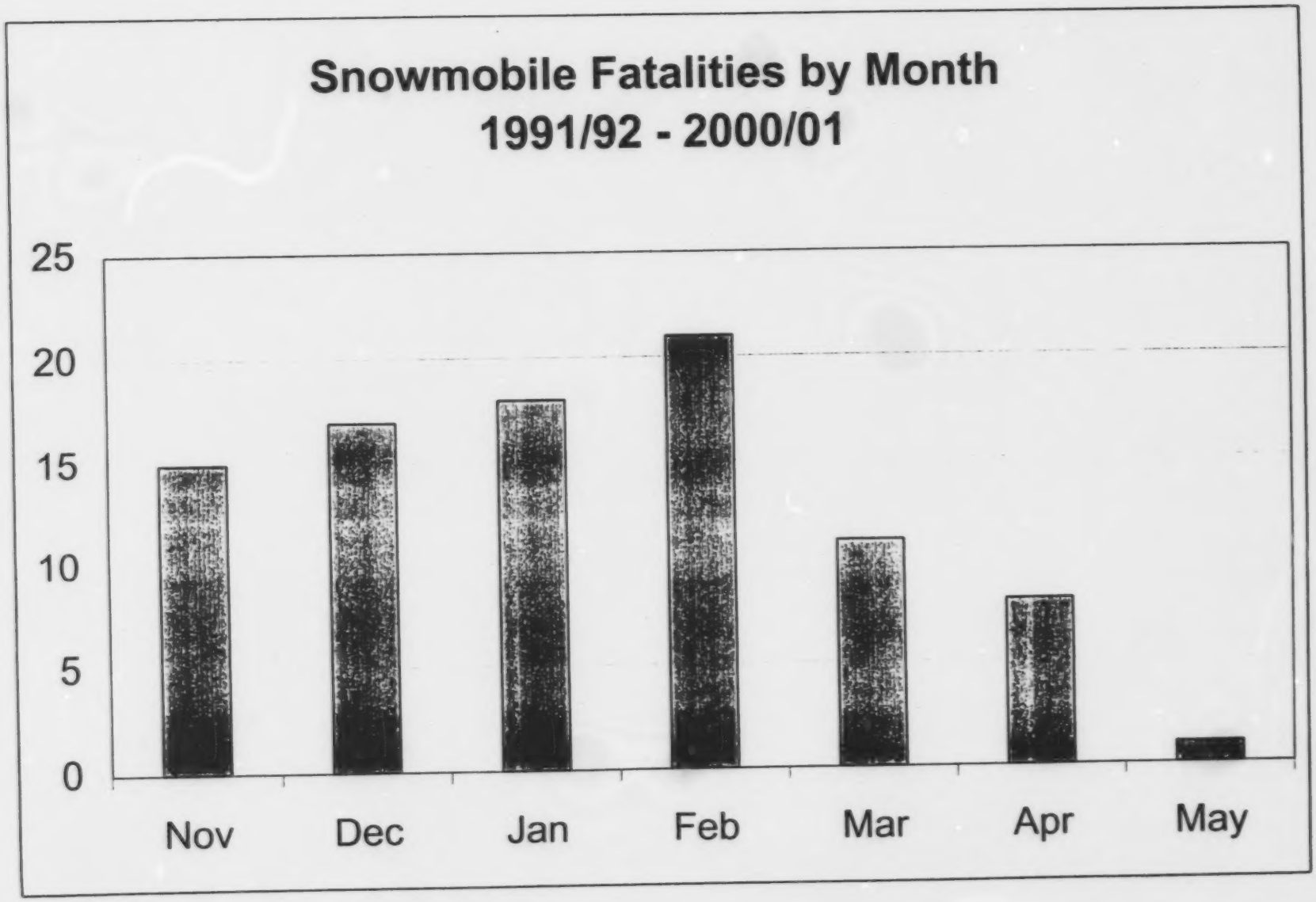

Position of Persons in Fatal Snowmobile Accidents 1991/92- 2000/01
4%
2%
13%
81%
Driver
Passenger
Pedestrian
Unknown

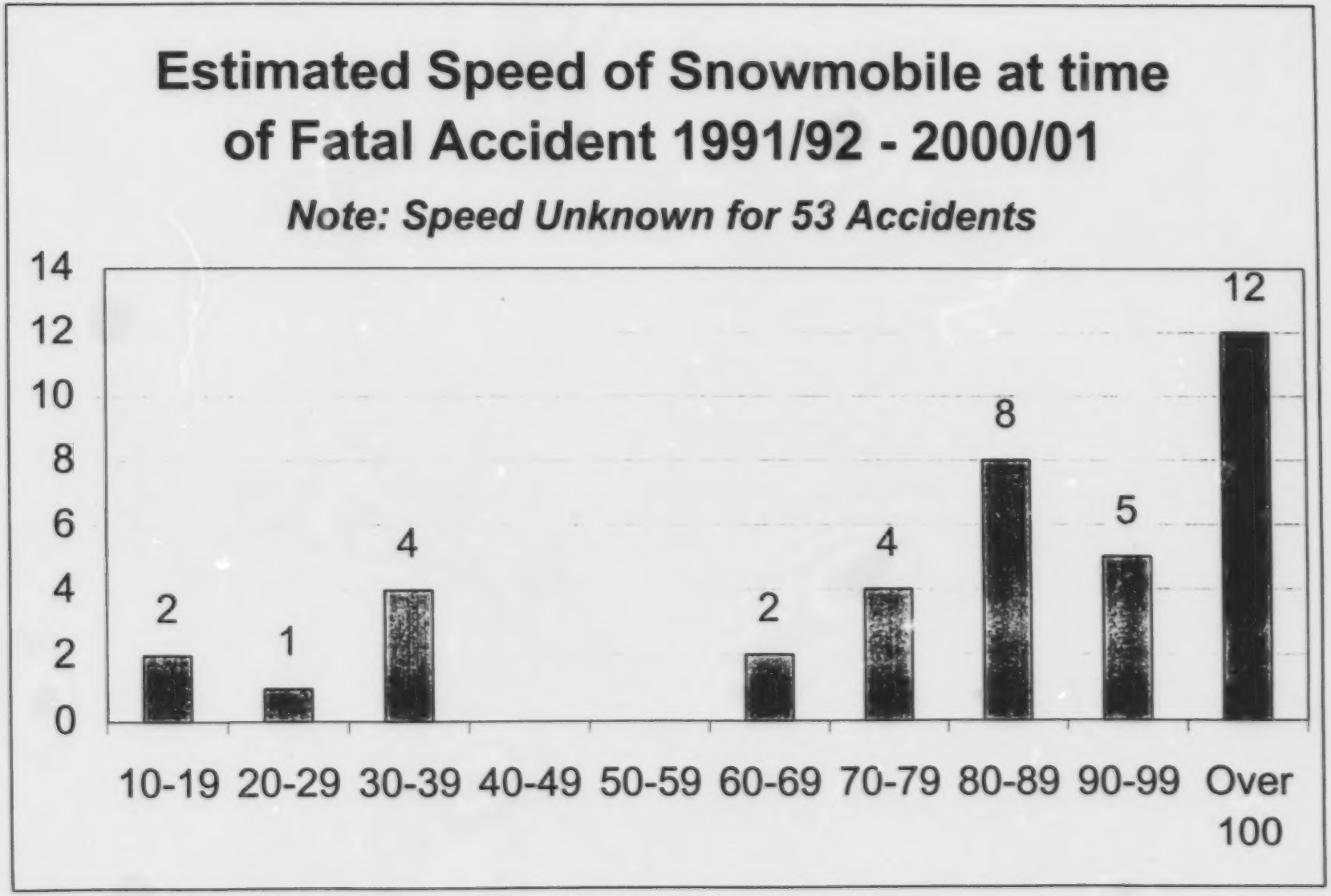
Weather Conditions at time of Fatal Snowmobile Accidents 1991/92 - 2000/01

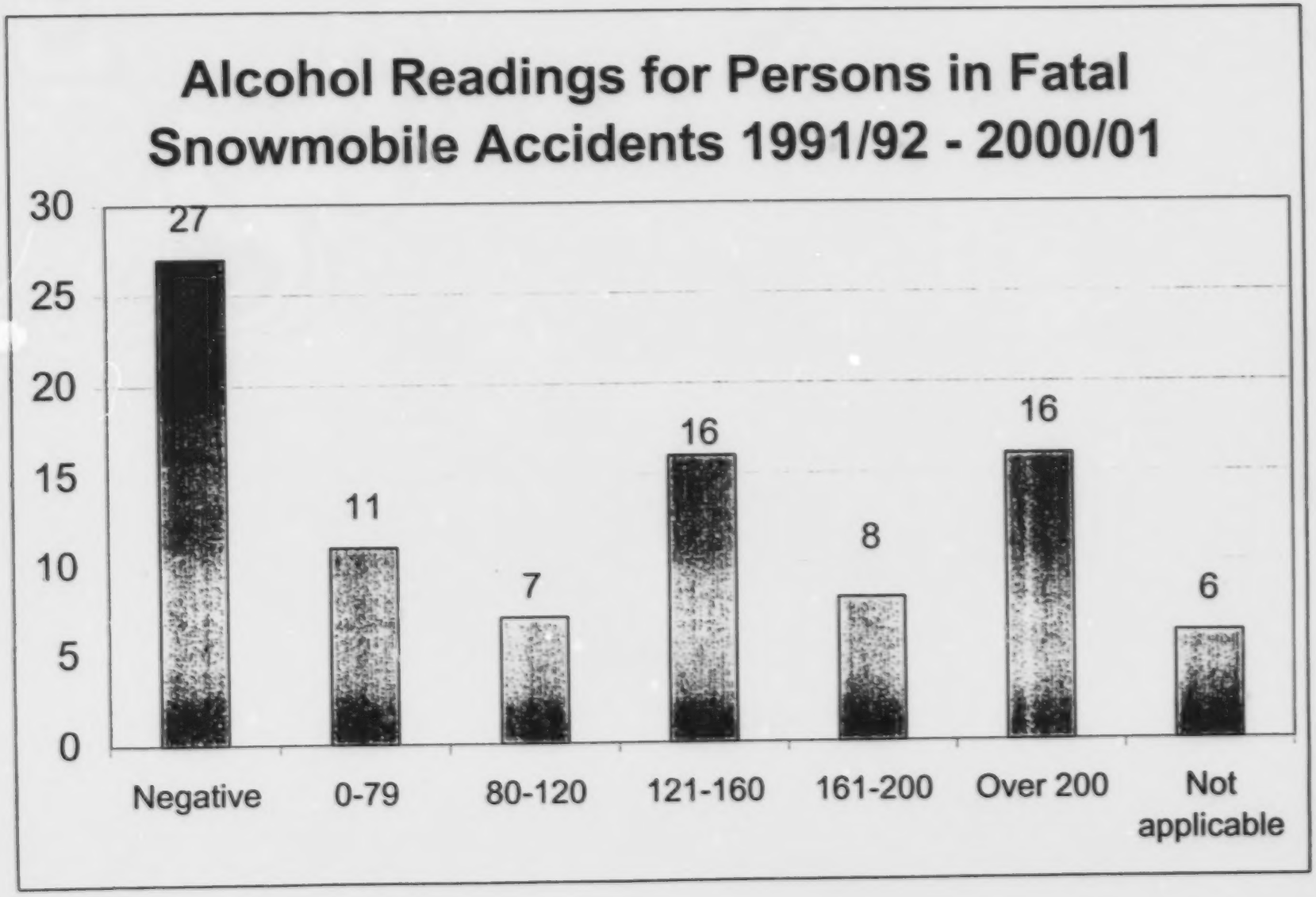


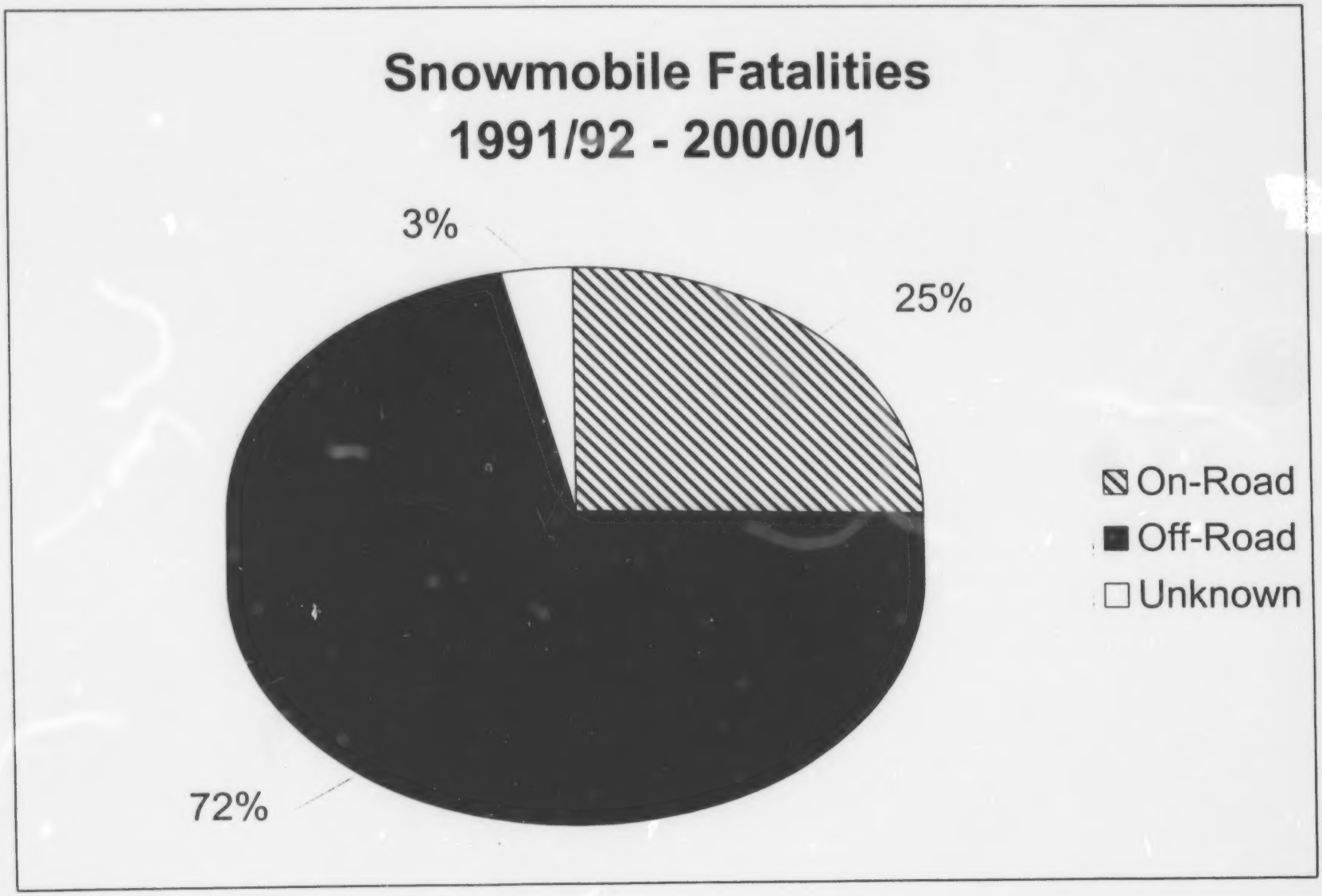
Time of Day for Fatal Snowmobile Accidents 1991/92 - 2000/01



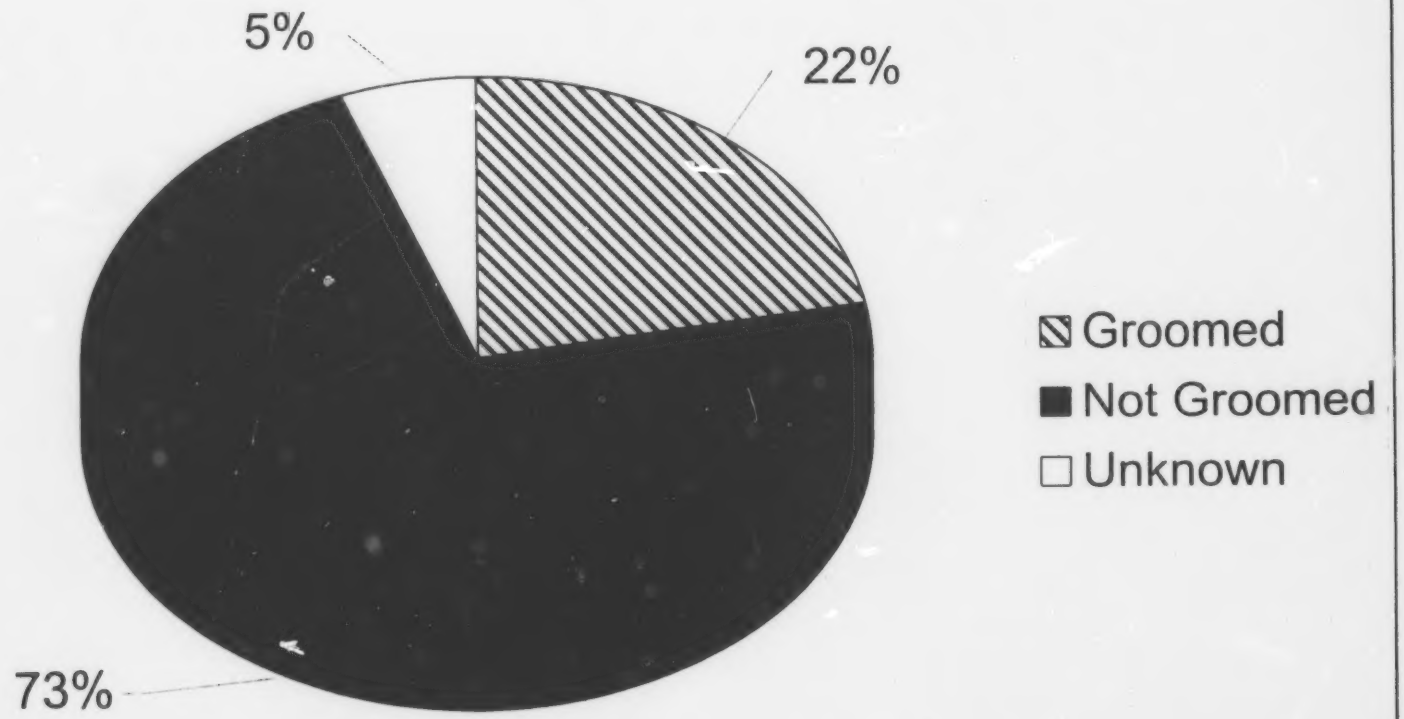

Snowmobile Fatalities by Month
1991/92 - 2000/01
25
20
15
10
5
0
Nov
Dec
Jan
Feb
Mar
Apr
May


Estimated Speed of Snowmobile at time of Fatal Accident 1991/92 - 2000/01
Note: Speed Unknown for 53 Accidents
14
12
10
8
6
4
2
0
2
1
4
2
4
8
5
12
10-19
20-29
30-39
40-49
50-59
60-69
70-79
80-89
90-99
Over 100

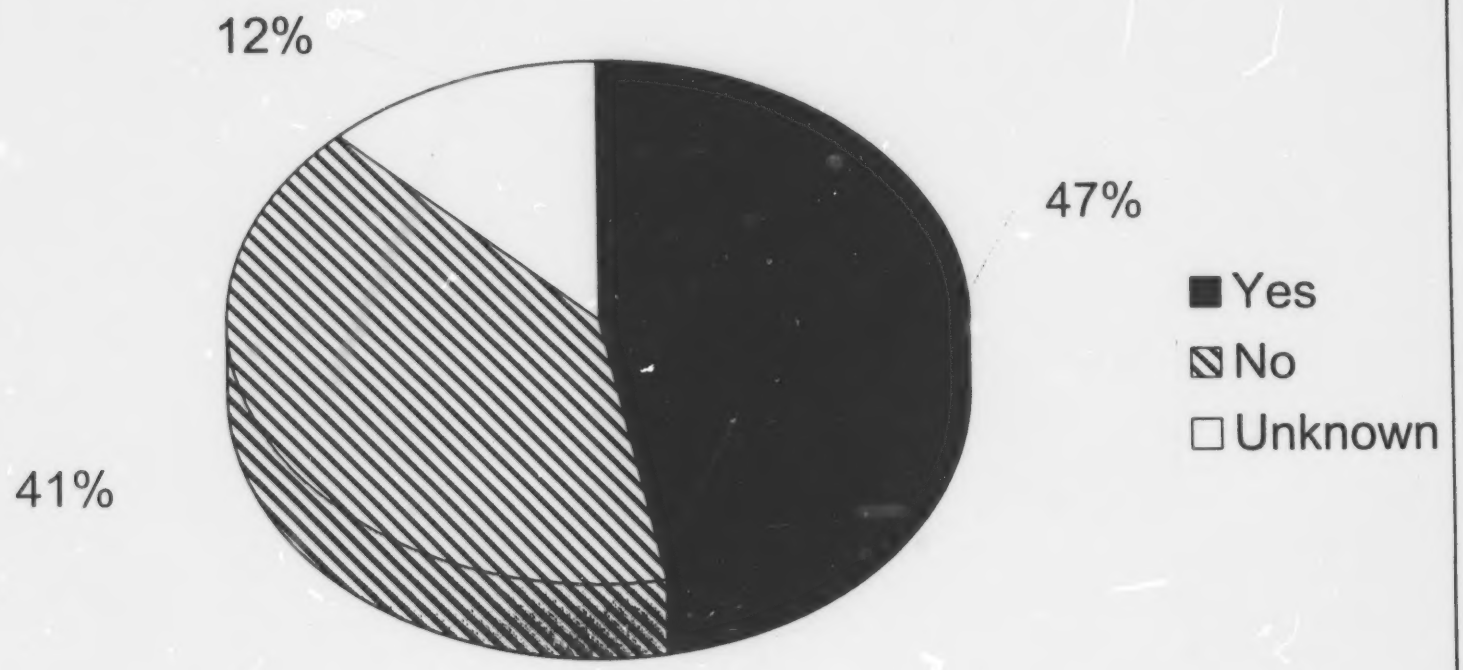

Alcohol Readings for Persons in Fatal Snowmobile Accidents 1991/92 - 2000/01
30
25
20
15
10
5
0
27
11
7
16
8
16
6
Negative
0-79
80-120
121-160
161-200
Over 200
Not applicable


Snowmobile Fatalities
1991/92 - 2000/01
3%
25%
72%
On-Road
Off-Road
Unknown

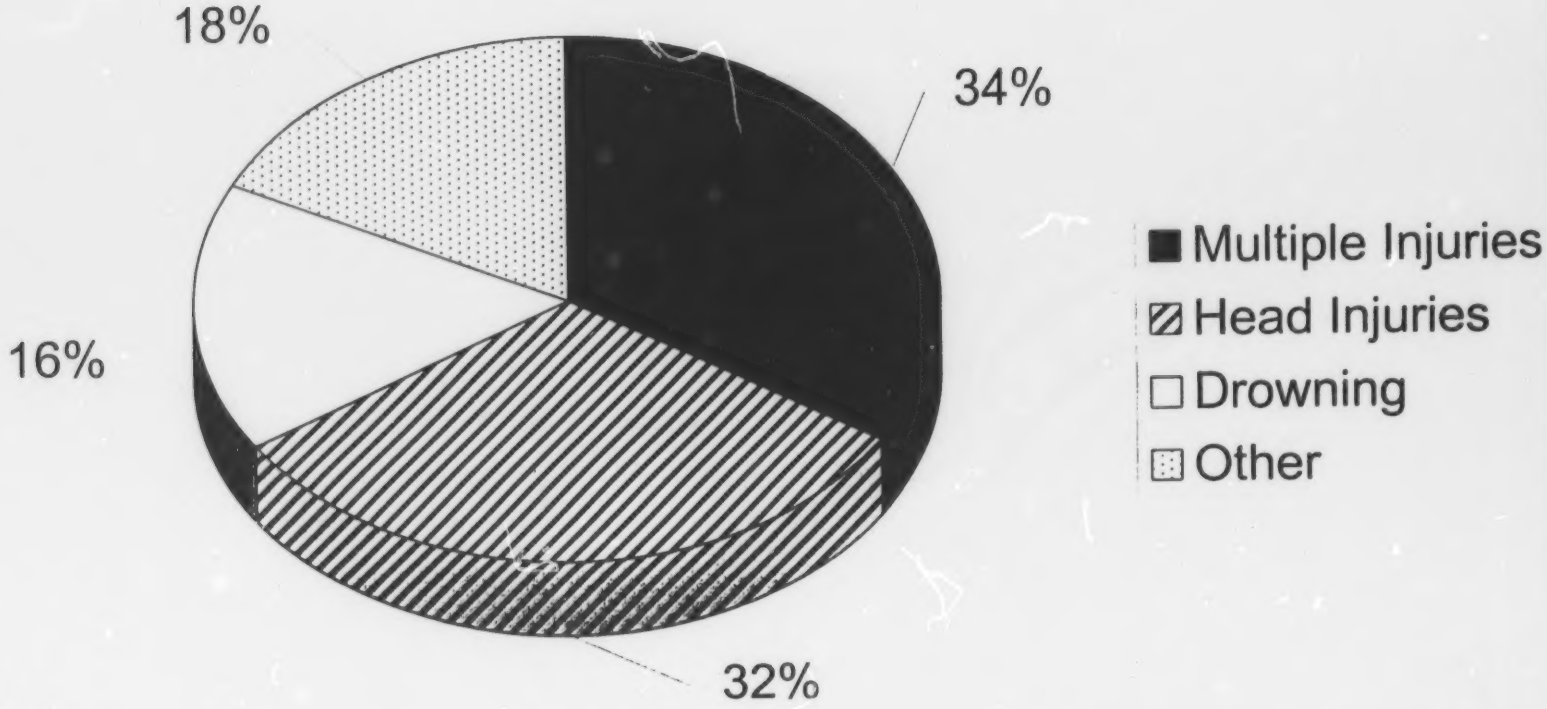
Type of Trails Used During Fatal Snowmobile Accidents 1991/92 - 2000/01



Helmet Usage of Persons in Fatal Snowmobile Accidents 1991/92 - 2000/01



Cause of Death in Fatal Snowmobile Accidents 1991/92 - 2000/01



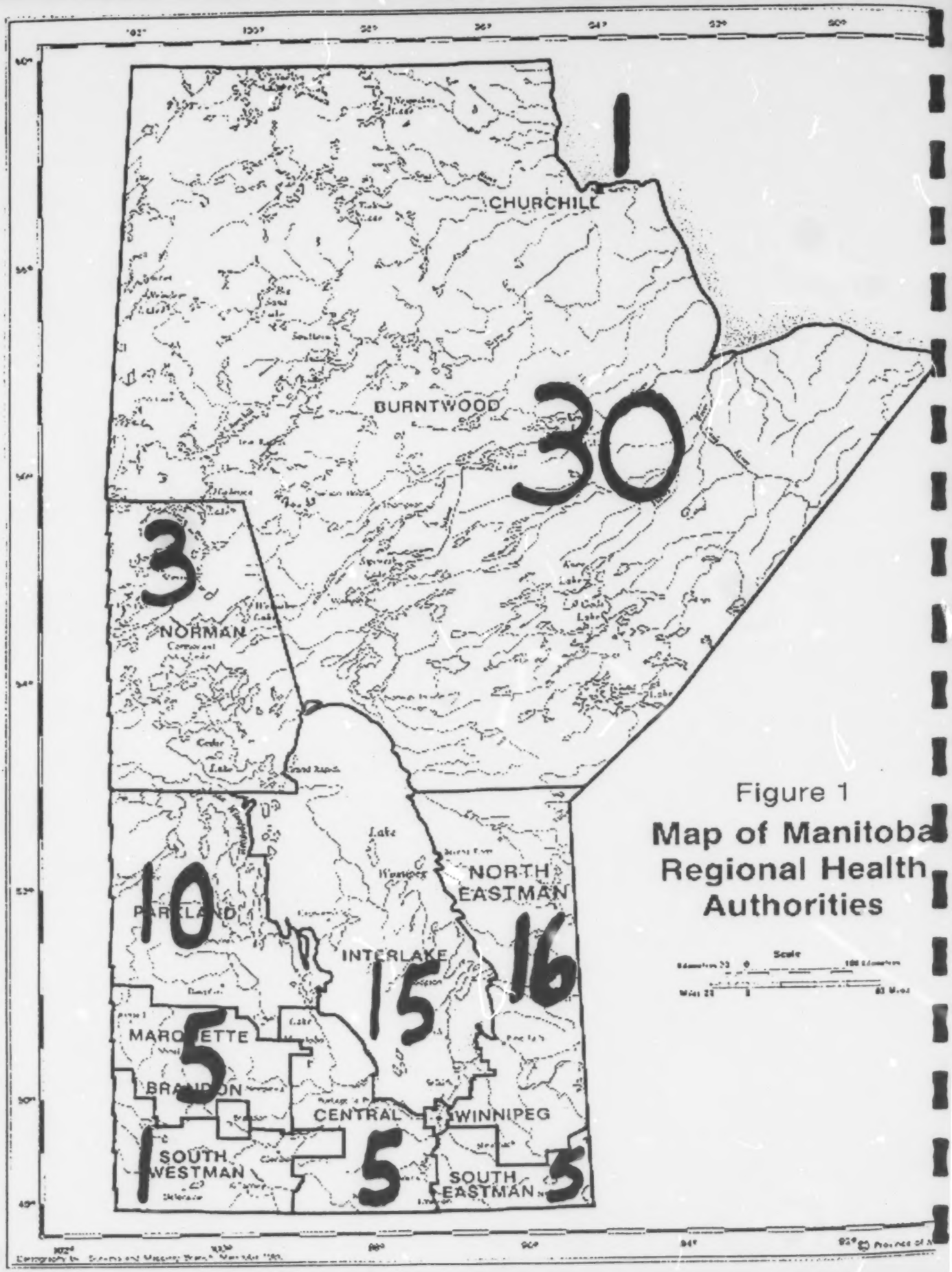
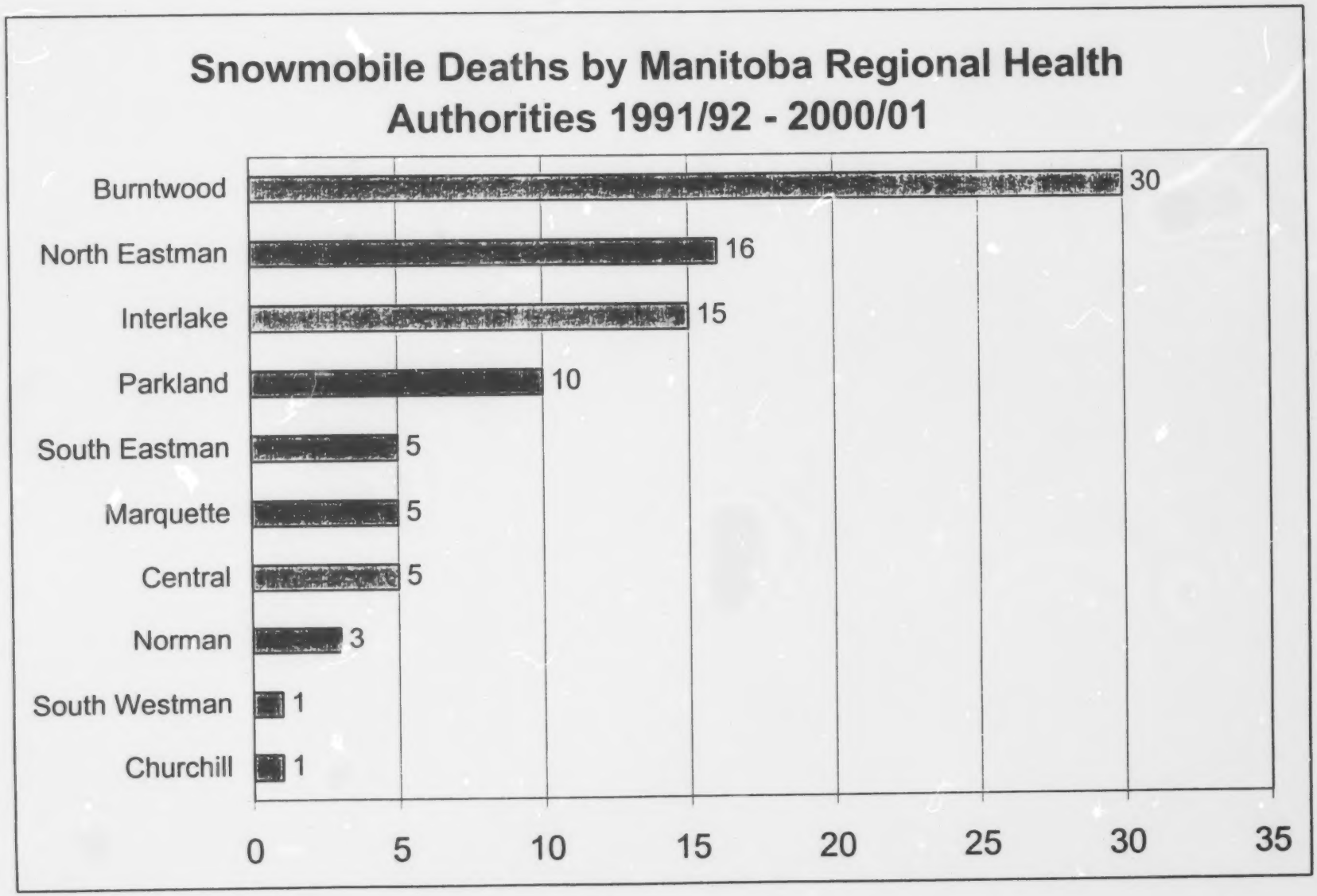
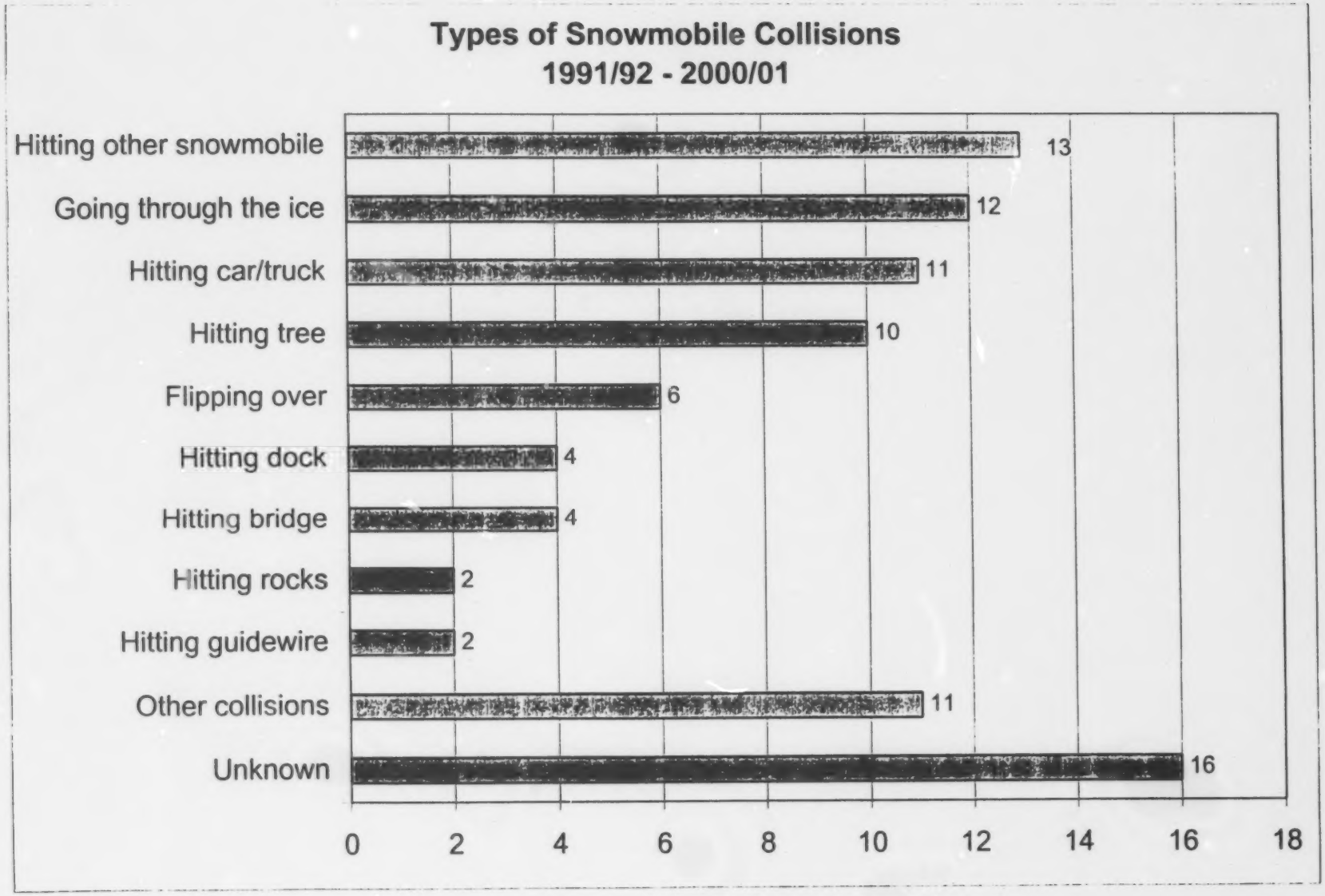


Figure 1

Map of Manitoba Regional Health Authorities


Snowmobile Deaths by Manitoba Regional Health Authorities 1991/92 - 2000/01
Burntwood
North Eastman
Interlake
Parkland
South Eastman
Marquette
Central
Norman
South Westman
Churchill
30
16
15
10
5
5
5
3
1
1
0
5
10
15
20
25
30
35


Types of Snowmobile Collisions
1991/92 - 2000/01
Hitting other snowmobile
13
Going through the ice
12
Hitting car/truck
11
Hitting tree
10
Flipping over
6
Hitting dock
4
Hitting bridge
4
Hitting rocks
2
Hitting guidewire
2
Other collisions
11
Unknown
16
0
2
4
6
8
10
12
14
16
18

Snowmobile Fatalities by Province and Year

	AB	SK	MB	ON	PQ	NB
1991/92	5	2	18	17	28	
1992/93	0	7	3	27	36	
1993/94	2	3	6	14	28	
1994/95	3	14	4	30	27	7
1995/96	6	7	11	30	32	3
1996/97	6	3	10	26	27	10
1997/98	5	1	13	43	27	9
1998/99	5	7	6	32	41	3
1999/00	1	2	8	16	21	4
2000/01	4	6	12		29	
Per 10,000 Registered	**1.67**	**3.48**	**3.79**	**0.72**	**1.88**	**3.39**

Qualifier on fatality rates:

Although deaths per 10,000 registered snowmobiles provides an estimate of the fatality rate it does not take into consideration the total kilometres driven per snowmobile. A province may have a higher fatality rate but this may be partially due to the amount each snowmobile is used in a given winter season. In addition, requirements for registration vary provincially and therefore may not be an accurate representation of all snowmobiles in the province.

MAIN FINDINGS OF RESEARCH

1. Primary use of snowmobiles is for recreation.

2. Weather conditions do not play a significant role in fatal snowmobile collisions.

3. Majority (63%) of accidents take place after sunset.

4. Of cases where speed is recorded, 66% were travelling at least 80km/hr. at the time of the accident.

5. Nearly two-thirds (64%) of fatalities had at least some level of alcohol in their blood. Of those with positive readings, 81% exceeded the legal limit.

6. One-quarter of fatal collisions occur on highways.

7. Almost three-quarters of collisions are on ungroomed trails.

8. Just under half (47%) of fatalities wore helmets.

9. Burntwood region of Manitoba (North) accounts for one-third of the fatalities but only 10% of the population. *Word of caution: This region likely has higher usage as many in this area use snowmobiles for travel purposes. In addition, there are likely more snowmobiles in this area than we realize since many aren't required to be registered.*

10. There are many types of snowmobile collisions but about half involve hitting other snowmobiles, cars, trees, or going through the ice.

11. The vast majority (85%) of victims are males. The 20-29 age group (37%) has the most fatalities followed by the 30-39 age group (23%).

12. Although last winter seemed like an unusually high number of fatalities (12), it was only the third highest total in the past decade.

13. Manitoba has the highest fatality rate in the country per 10,000 registered snowmobiles followed closely by Saskatchewan and New Brunswick. Ontario has the lowest rate.

LIMITATIONS OF RESEARCH

1. Speed estimates are primarily anecdotal based on conversations held between the RCMP and witnesses.

2. Purpose of travel is not always well defined. Hard to determine if travel in the northern region is always for transportation. Travel in the central and southern regions appear to be primarily for recreational purposes.

3. Some regions have more fatalities but impossible to compare as there is no data available for snowmobile registrations within each region.

4. Difficult to determine if person was travelling on a groomed trail as this is rarely asked during questioning.

5. Although 60% of the cases don't mention weather conditions, they don't appear to be a factor in most accidents. A few files had witnesses stating snowmobiles kick up a lot of snow that reduces visibility.

6. Helmet usage is about 50% but may in fact be less. Statements in a few files indicate the chin strap was not used.

Appendix F

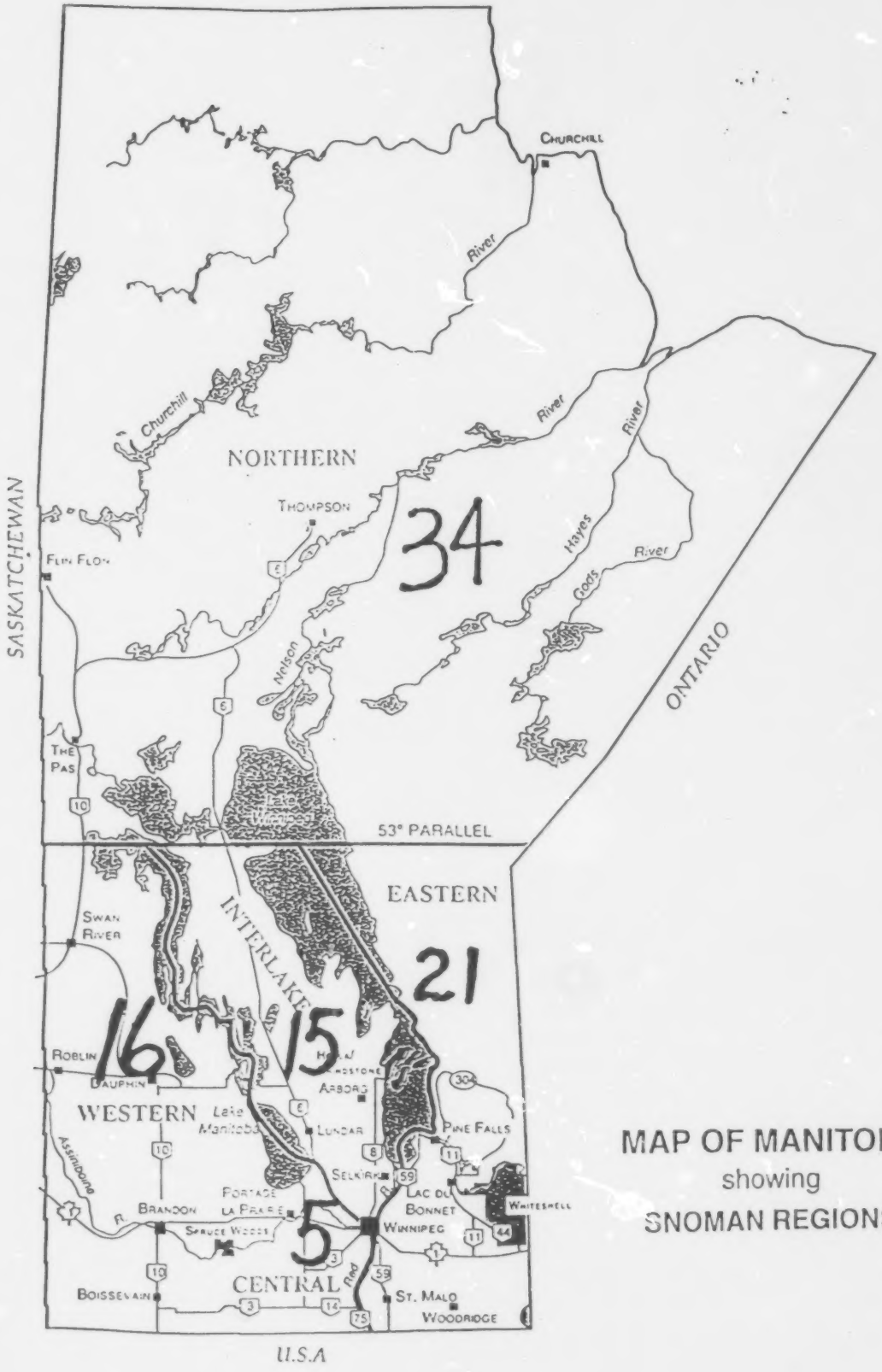
Manitoba Snowmobile Fatalities By Snowman Inc. Region

(1991-2000)

Manitoba
Transportation and
Government Services

Transports et
Services gouvernementaux
Manitoba

Manitoba Snowmobile Fatalities by Snoman Inc. Region
(1991 - 2000)



MAP OF MANITOBA
showing
SNOMAN REGIONS

Appendix G

Excerpt From The Traffic Collision Statistics Report 1999

Excerpt From The Traffic Collision Statistics Report 2000 (Unpublished)

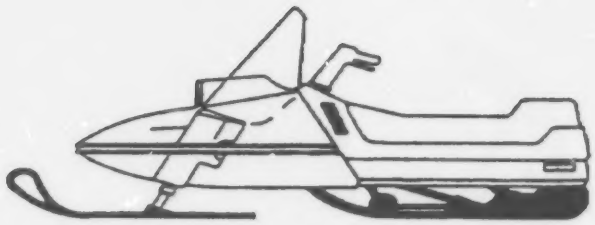
Snowmobile Collision Statistics 1998/99, 1999/00 (Preliminary), and 2000/01 (Preliminary)

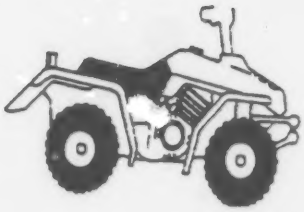
Manitoba
Transportation and
Government Services

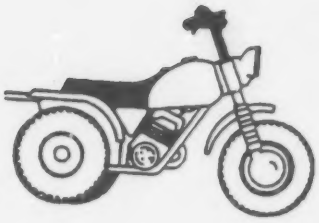
Transports et
Services gouvernementaux
Manitoba

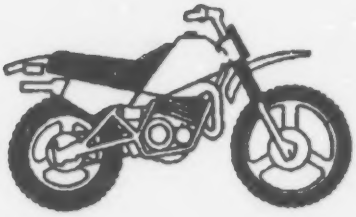
Excerpt from the Traffic Collision Statistics Report, 1999

Section 11







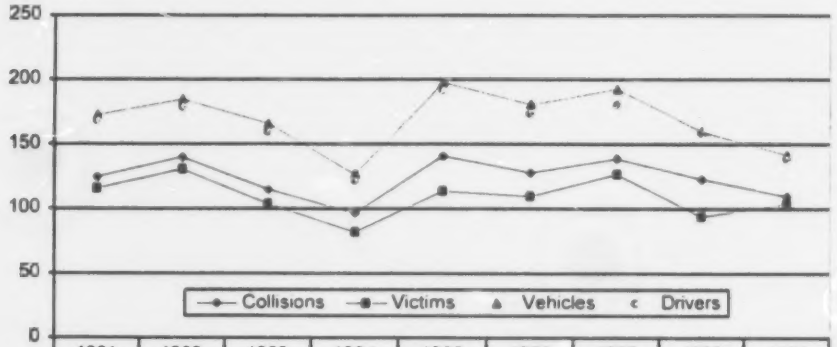


Off-Road Vehicle Collisions

Collision Summary
1991 – 1999

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total Collisions	125	140	115	97	141	128	139	123	110
Fatal	7	6	3	9	11	7	12	10	8
Injury	80	104	78	59	84	84	87	64	76
Property Damage	38	30	34	29	46	37	40	49	26
Total Victims	116	131	104	82	114	110	127	94	104
Killed	7	6	3	9	11	8	15	10	8
Injured	109	125	101	73	103	102	112	84	96
Total Vehicles Involved	173	185	166	127	198	181	193	160	142
Fatal	10	9	5	11	16	8	21	13	9
Injury	111	132	117	78	110	118	116	83	99
Property Damage	52	44	44	38	72	55	56	64	34
Total Drivers Involved	169	179	160	122	192	174	181	159	139
Fatal	10	8	5	11	16	8	19	12	9
Injury	111	132	116	76	106	116	108	83	97
Property Damage	48	39	39	35	70	50	54	64	33

Comparison of Total Off-Road Vehicle Collisions
by Collision Victims, Vehicle Involvement and Driver Involvement
1991 – 1999



	1991	1992	1993	1994	1995	1996	1997	1998	1999
Collisions	125	140	115	97	141	128	139	123	110
Victims	116	131	104	82	114	110	127	94	104
Vehicles	173	185	166	127	198	181	193	160	142
Drivers	169	179	160	122	192	174	181	159	139

Collision Summary
by Vehicle Involvement
1999

	Snowmobile	ATV[1]	Motorcycle	Other[2]	Total
Total Collisions	74	25	8	3	110
Fatal	4	3	0	1	8
Injury	46	20	8	2	76
P. Damage	24	2	0	0	26
Total Victims	57	20	9	18	104
Killed	4	0	0	4	8
Injured	53	20	9	14	96
Total Vehicles Involved	85	23	10	24	142
Fatal	4	0	1	4	9
Injury	53	21	9	16	99
P. Damage	28	2	0	4	34
Total Drivers Involved	82	23	10	24	139
Fatal	4	0	1	4	9
Injury	51	21	9	16	97
P. Damage	27	2	0	4	33

1. ATV (All Terrain Vehicles) includes 3, 4 and 6 wheel types
2. Vehicles not registered as an off-road vehicle, including not stated category

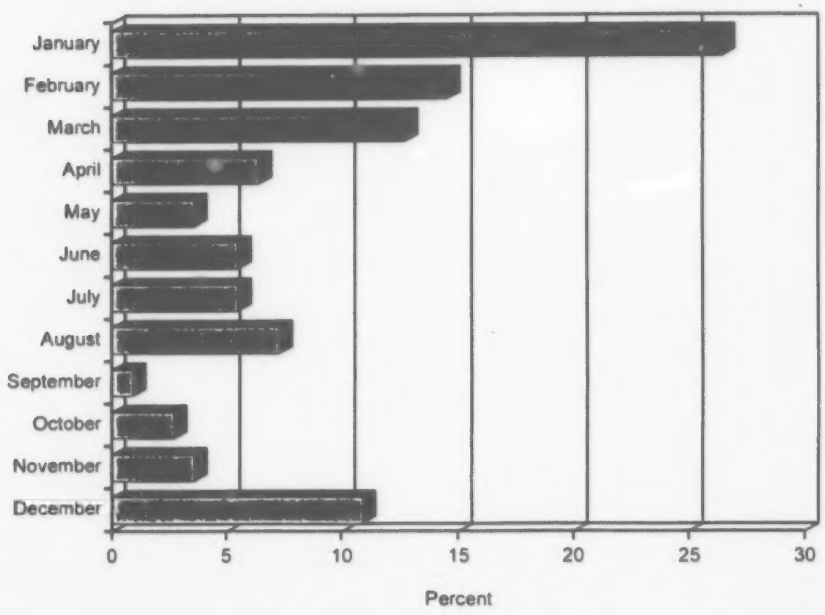
In examining snowmobile vehicle involvement, snowmobiles accounted for 67.3% of total off-road collisions, 54.8% of total victims, 60.0% of total vehicles involved, and 59.0% of total drivers involved.

By Month of Occurrence and Collision Type
1999

Month	Collision Type			Total	%
	Fatal	Injury	P. Damage		
January	3	17	9	29	26.4
February	1	12	3	16	14.5
March	0	9	5	14	12.7
April	1	5	1	7	6.4
May	0	4	0	4	3.6
June	1	5	0	6	5.5
July	0	5	1	6	5.5
August	1	6	1	8	7.3
September	0	1	0	1	0.9
October	1	2	0	3	2.7
November	0	4	0	4	3.6
December	0	6	6	12	10.9
Total	8	76	26	110	100.0

December, January, February and March accounted for 64.5% (71) of the total off-road vehicle collisions. January had the highest number of fatal collisions at 37.5% (3) and recorded the highest rate of injury and property damage off-road vehicle collisions.

Distribution of Total Off-Road Vehicle Collisions
by Month of Occurrence
1999

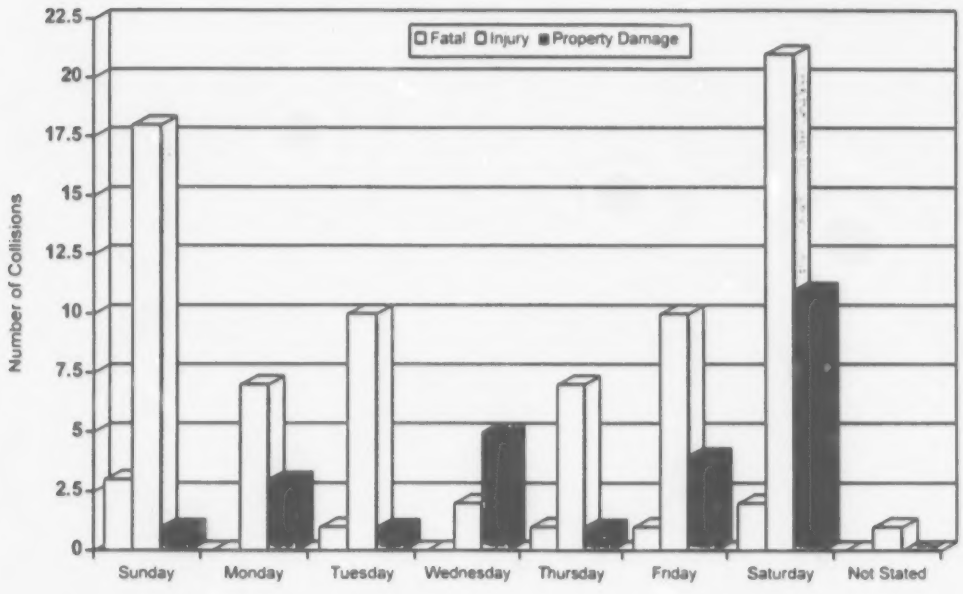


By Day of Occurrence and Collision Type
1999

Day	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Sunday	3	18	1	22	20.0
Monday	0	7	3	10	9.1
Tuesday	1	10	1	12	10.9
Wednesday	0	2	5	7	6.4
Thursday	1	7	1	9	8.2
Friday	1	10	4	15	13.6
Saturday	2	21	11	34	30.9
Not Stated	0	1	0	1	.9
Total	8	76	26	110	100.0

Fatal crashes occurred most often on weekends. Collisions which resulted in deaths occurred more frequently on Saturday and Sunday (25.0% and 37.5% respectively), while no fatal collisions took place on Monday and Wednesday. Off-road injury collisions happened most often on Saturday and Sunday (27.6% and 23.7%), while these crashes occurred least often on Wednesday, at 2.6%.

Comparison of Off-Road Vehicle Collisions
by Day of Occurrence and Collision Type
1999

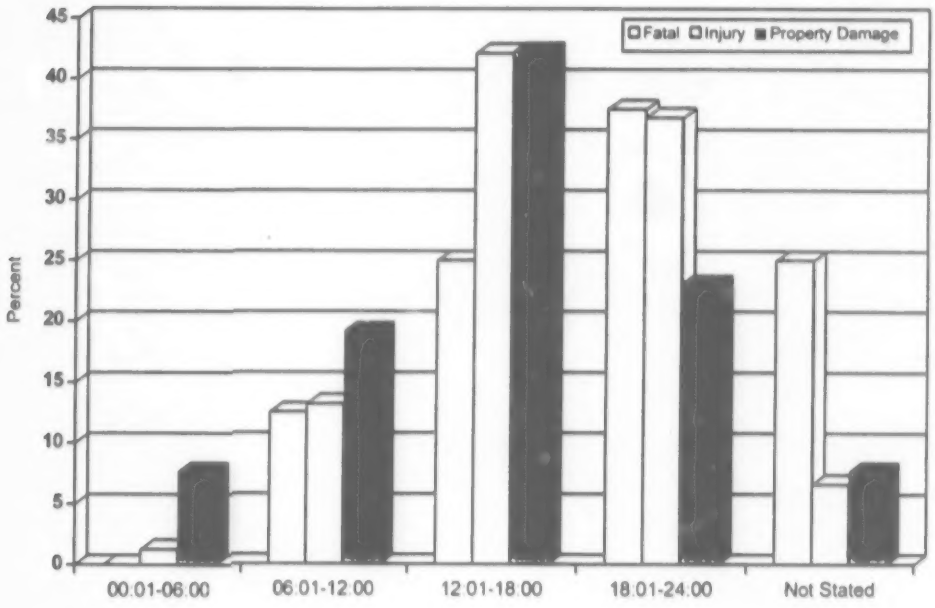


By Time of Occurrence and Collision Type
1999

Time	Collision Type			Total	%
	Fatal	Injury	P. Damage		
00:01 – 06:00	0	1	2	3	2.7
06:01 – 12:00	1	10	5	16	14.6
12:01 – 18:00	2	32	11	45	40.9
18:01 – 24:00	3	28	6	37	33.6
Not Stated	2	5	2	9	8.2
Total	8	76	26	110	100.0

The highest incidence of total off-road vehicle collisions (40.9%) occurred between the time period of 12:01 – 18:00 hours, followed by 18:01 – 24:00 hours at 33.6%.

Comparison of Total Off-Road Vehicle Collisions
by Time of Occurrence and Collision Type
1999

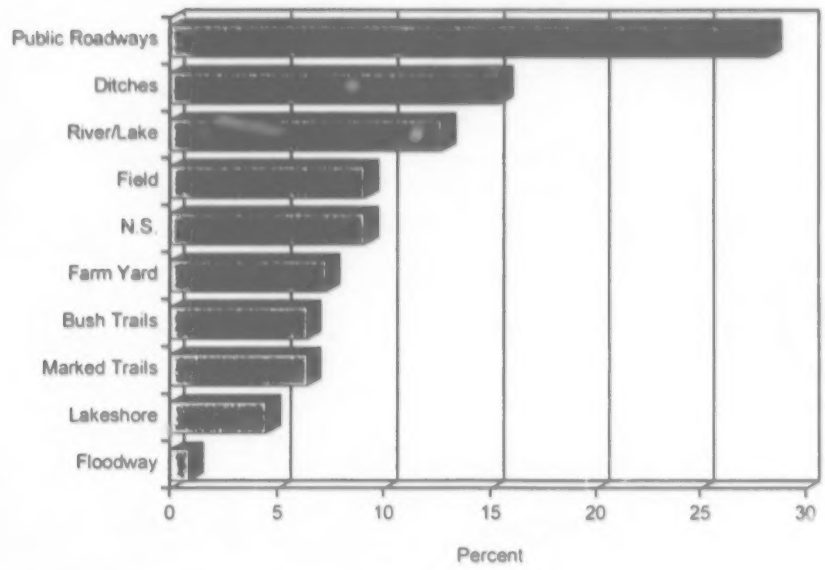


By Collision Location and Collision Type
1999

Location	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Public Roadway	2	21	8	31	28.2
Ditches	1	12	4	17	15.4
River/Lake	1	11	2	14	12.7
Field	1	7	2	10	9.1
Bush Trails/Winter Road	1	3	3	7	6.4
Farm Yard/Private Property	0	7	1	8	7.3
Marked/Groom Trails	0	4	3	7	6.4
Parking Lot	0	0	0	0	0.0
Lakeshore	2	3	0	5	4.5
Floodway/Diversion	0	0	1	1	0.9
Not Stated	0	8	2	10	9.1
Total	8	76	26	110	100.0

Most off-road vehicle accidents (56.3%) were known to have occurred on "public roadways" (28.2%), "ditches" (15.4%), and "river/lake" (12.7%).

Distribution of Total Off-Road Vehicle Collisions
by Collision Location
1999



Off-Road Vehicle Collision Victims by Age Group, Injury Type, and Sex 1999

Age Group	Injury Type						Total Victims
	Killed			Injured			
	Male	Female	Total	Male	Female	Total	
0-4	0	0	0	1	0	1	1
5-9	0	0	0	1	3	4	4
10-14	0	0	0	7	5	12	12
15-19	0	1	1	14	2	16	17
20-24	1	0	1	14	2	16	17
25-34	2	0	2	18	4	22	24
35-44	1	0	1	7	6	13	14
45-54	1	0	1	4	1	5	6
55-64	0	0	0	1	1	2	2
65>	1	0	1	0	1	1	2
Not Stated	1	0	1	2	2	4	5
Total	7	1	8	69	27	96	104

Male victims made up 73.1% (76) of all persons killed or injured, whereas females made up 26.9% (28). Of the 99 victims whose ages were known, the age group 25-34 (24.2%), 15-19 (17.2%) and 20-24 (17.2%) had the highest number of off-road collision victims killed or injured.

Off-Road Vehicle Collision Victims by Safety Equipment and Injury Type 1999

Safety Equipment	Injury Type		Total Victims
	Killed	Injured	
Safety Helmet Worn	2	34	36
Safety Helmet Not Worn	3	36	39
Not Stated	3	20	23
Not Applicable	0	6	6
Total	8	96	104

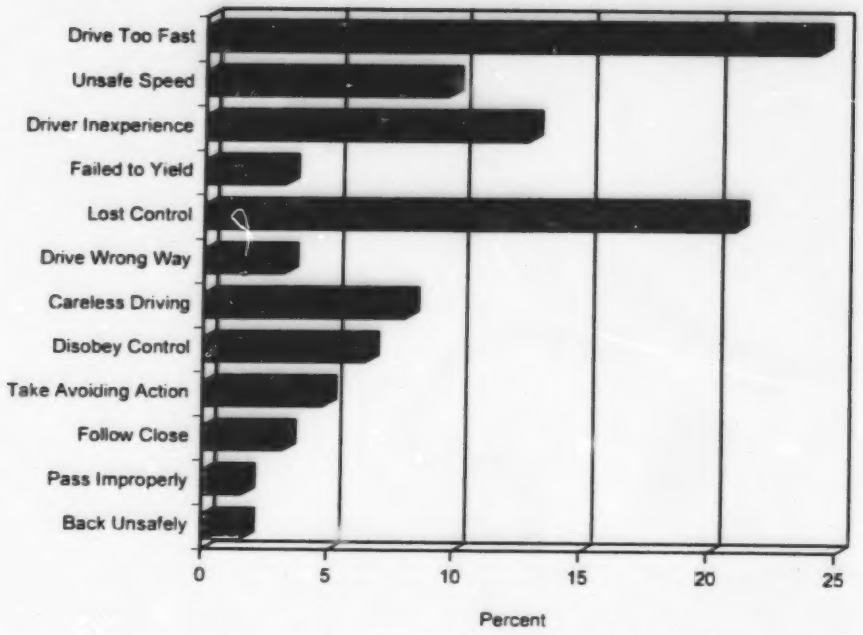
Of the total number of off-road vehicle collision victims, 37.5% (39) were reported as not wearing a safety helmet at time of collision occurrence. Safety helmet usage was unknown for a further 22.1%.

Driver Involvement
by Driver Action and Collision Type
1999

Driver Action	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Drive Properly [1]	3	25	17	45	32.4
Follow Too Closely	0	2	0	2	1.4
Drive Too Fast For Conditions	1	14	0	15	10.8
Unsafe Operating Speed	0	6	0	6	4.3
Pass Improperly	0	1	0	1	0.7
Fail to Yield	0	1	1	2	1.4
Disobey Traffic Control	1	3	0	4	2.9
Drive Wrong Way	0	2	0	2	1.4
Back Unsafely	0	1	0	1	0.7
Careless Driving	2	1	2	5	3.6
Lost Control/Drive off Roadway	0	11	2	13	9.4
Take Avoiding Action	1	1	1	3	2.2
Driver Inexperience	0	7	1	8	5.8
Not Stated	1	22	9	32	23.0
Total	9	97	33	139	100.0

[1] No apparent improper driving action

Comparison of At-Fault Driver Actions
in Off-Road Vehicle Collisions
1999



Driver error or misjudgement was reported for 44.6% of total drivers involved in off-road traffic collisions. "Drive too fast for conditions" (24.2%), "lost control/drive off roadway" (21.0%) and "driver inexperience" (12.9%) were the most frequently identified driver actions contributing to off-road vehicle collisions.

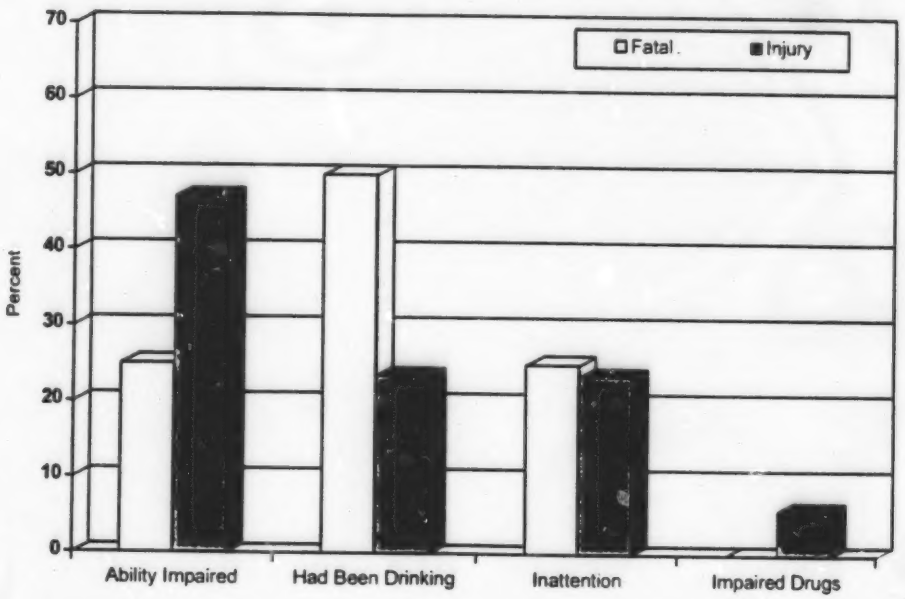
Driver Involvement
by At-Fault Human Condition Factors and Collision Type
1999

Human Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Apparently Normal	2	54	22	78	56.1
Distraction/Inattention	1	4	1	6	4.3
Ability Impaired by Alcohol	1	8	0	9	6.5
Had Been Drinking/Suspected Alcohol Use[1]	2	4	0	6	4.3
Ability Impaired by Drugs	0	1	0	1	0.7
Not Stated	3	26	10	39	28.1
Total	9	97	33	139	100.0

1. These statistics are understated and represent only those collisions where alcohol involvement was apparent.

Of the 139 drivers involved in off-road vehicle collisions, 22 or 15.8% were cited with having at-fault human condition factors that lead to collision causation. Of the 9 drivers involved in fatal off-road vehicle collisions, 4 or 44.4% were cited with at-fault human condition factors. Overall, "ability impaired by alcohol", "distraction/inattention", and "had been/suspected alcohol use" were reported as the most common at-fault human condition factors involved in collision causation.

Comparison of At-Fault Human Condition Factors
by Fatal and Injury Collision Type
1999

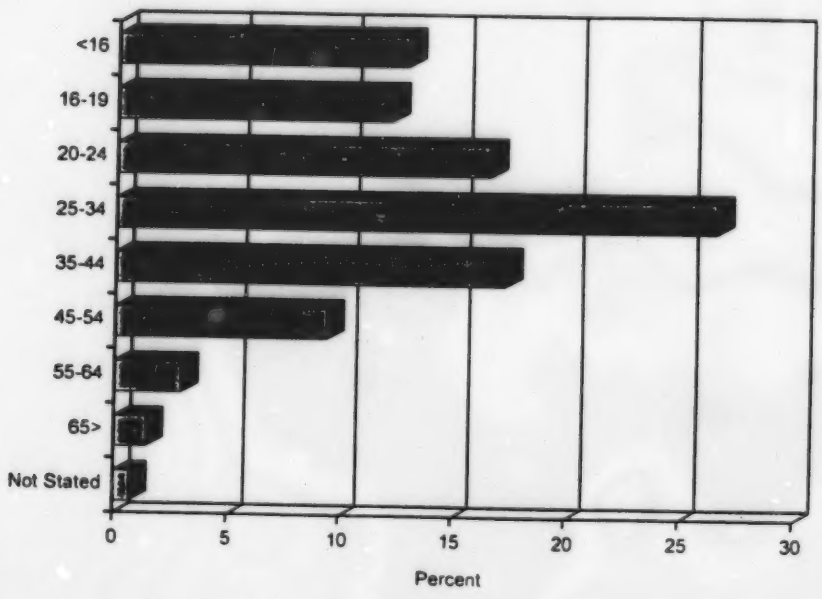


Driver Involvement
by Age Group and Collision Type
1999

Age Group	Collision Type			Total	%
	Fatal	Injury	P. Damage		
<16	1	15	2	18	12.9
16-19	0	14	3	17	12.2
20-24	2	16	5	23	16.6
25-34	3	24	10	37	26.6
35-44	1	16	7	24	17.3
45-54	1	7	5	13	9.4
55-64	0	3	1	4	2.9
65>	1	1	0	2	1.4
Not Stated	0	1	0	1	0.7
Total	9	97	33	139	100.0

Of the total number of drivers involved in off-road vehicle collisions, 43.9% were between the ages of 25 to 44, 28.8% were 16-24, 13.7% were over the age of 44 years and 12.9% were under 16 years of age.

Distribution of Total Driver Involvement in Off-Road Vehicle Collisions
by Age Group
1999



Excerpt from the Traffic Collision Statistics Report, 2000
(Unpublished)

Off-Road Vehicle Traffic Collisions
2000

Prepared by: Research Section
Division of Driver and Vehicle Licencing
Transportation and Government Services
B102C 1075 Portage Avenue
Winnipeg MB R3G 0S1
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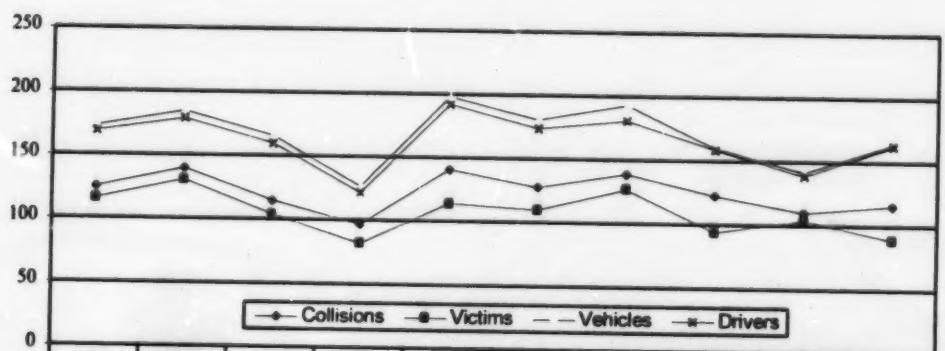
Collision Summary
1991 – 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total Collisions	125	140	115	97	141	128	139	123	110	116
Fatal	7	6	3	9	11	7	12	10	8	9
Injury	80	104	78	59	84	84	87	64	76	64
Property Damage	38	30	34	29	46	37	40	49	26	43
Total Victims	116	131	104	82	114	110	127	94	104	89
Killed	7	6	3	9	11	8	15	10	8	10
Injured	109	125	101	73	103	102	112	84	96	79
Total Vehicles Involved	173	185	166	127	198	181	193	160	142	164
Fatal	10	9	5	11	16	8	21	13	9	17
Injury	111	132	117	78	110	118	116	83	99	85
Property Damage	52	44	44	38	72	55	56	64	34	62
Total Drivers Involved	169	179	160	122	192	174	181	159	139	163
Fatal	10	8	5	11	16	8	19	12	9	15
Injury	111	132	116	76	106	116	108	83	97	84
Property Damage	48	39	39	35	70	50	54	64	33	64

Comparison of Total Off-Road Vehicle Collisions, Collision Victims, Vehicle Involvement and Driver Involvement
1991 – 2000



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Collisions	125	140	115	97	141	128	139	123	110	116
Victims	116	131	104	82	114	110	127	94	104	89
Vehicles	173	185	166	127	198	181	193	160	142	164
Drivers	169	179	160	122	192	174	181	159	139	163

Source: Manitoba Transportation and Government Services

Collision Summary
by Vehicle Involvement
2000

	Snowmobile	ATV[1]	Motorcycle	Other[2]	Total
Total Collisions	68	16	3	29	116
Fatal	6	1	0	2	9
Injury	38	11	3	12	64
P. Damage	24	4	0	15	43
Total Victims	67	19	0	3	89
Killed	8	2	0	0	10
Injured	59	17	0	3	79
Total Vehicles Involved	99	25	0	40	164
Fatal	13	2	0	2	17
Injury	54	13	0	18	85
P. Damage	32	10	0	20	62
Total Drivers Involved	99	25	0	39	163
Fatal	11	2	0	2	15
Injury	54	13	0	17	84
P. Damage	34	10	0	20	64

[1]ATV (all-terrain vehicles) includes 3, 4 and 6 wheel types.
[2]Other ORV vehicles plus vehicles not registered as an off-road vehicle, and not stated category.

Snowmobiles accounted for 59.5% of total off-road collisions, 75.3% of all victims, 60.4% of all vehicles involved, and 60.7% of all drivers involved.

Vehicle Involvement by
Vehicle Type and Active Registration, Yes/No
2000

Vehicle Type	Active Registration		Total	%
	Yes	No		
Snowmobile	57	12	69	61.1
ATV 4	6	6	12	10.6
ATV 3	0	3	3	2.7
Motorcycle	0	1	1	0.9
HTA Vehicles[1]	24	2	26	23.0
Other ORV	2	0	2	1.7
Total	89	24	113	100.0

[1] HTA Vehicles refers to motorized vehicles defined and registered pursuant to *The Highway Traffic Act*.

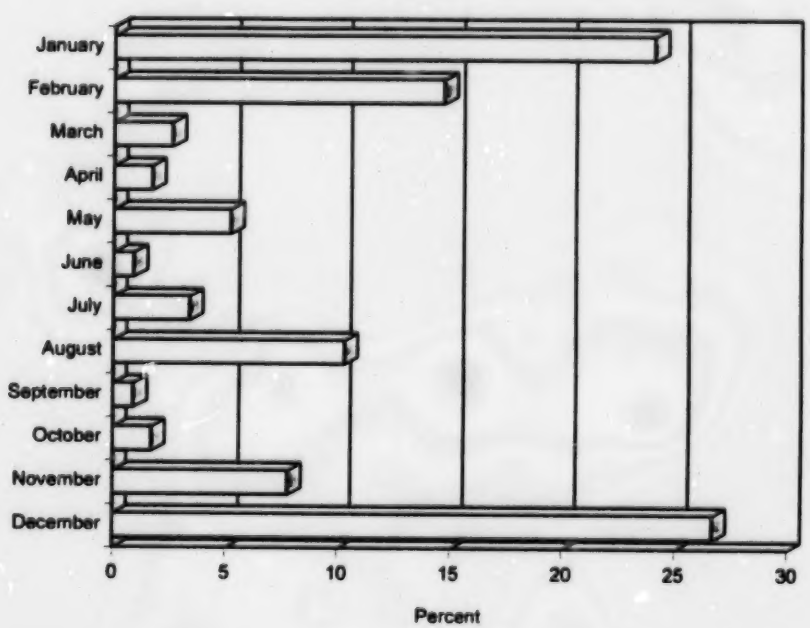
Of the 69 snowmobiles whose registration status was noted in traffic accident reports, 57 (82.6%) were registered at time of collision occurrence.

Off-Road Vehicle Collisions
by Month of Occurrence and Collision Type
2000

Month	Collision Type			Total	%
	Fatal	Injury	P. Damage		
January	0	17	11	28	24.1
February	4	5	8	17	14.7
March	0	2	1	3	2.6
April	0	2	0	2	1.7
May	0	4	2	6	5.2
June	0	1	0	1	0.9
July	2	0	2	4	3.4
August	0	9	3	12	10.3
September	0	1	0	1	0.9
October	1	0	1	2	1.7
November	0	6	3	9	7.8
December	2	17	12	31	26.7
Total	9	64	43	116	100.0

December and January accounted for 50.8% (59) of the total off-road vehicle collisions. February had the highest percentage of fatal accidents, 44.5% (4). January and December each accounted for 26.6% of injury collisions (17).

Distribution of Total Off-Road Vehicle Collisions
by Month of Occurrence
2000



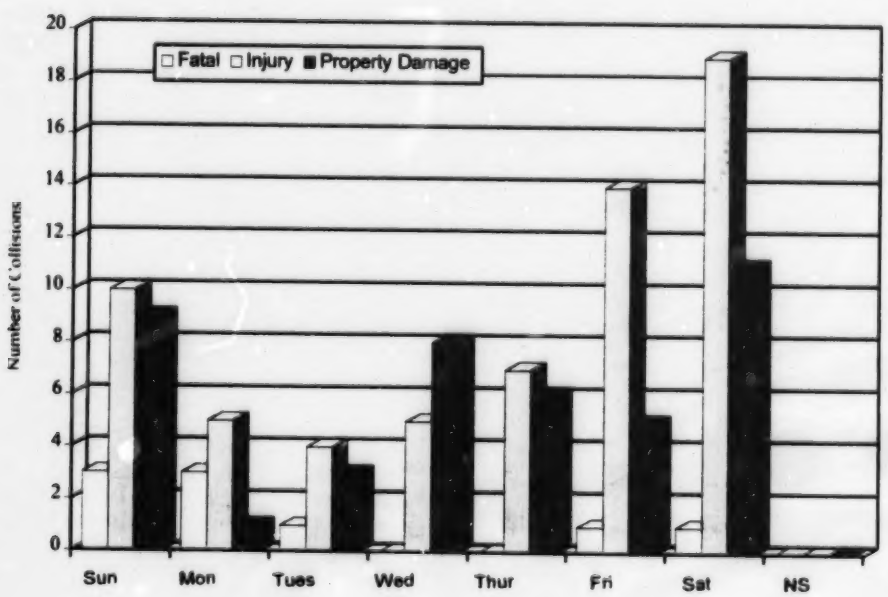
Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collisions
by Day of Occurrence and Collision Type
2000

Day	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Sunday	3	10	9	22	19.0
Monday	3	5	1	9	7.8
Tuesday	1	4	3	8	6.9
Wednesday	0	5	8	13	11.2
Thursday	0	7	6	13	11.2
Friday	1	14	5	20	17.2
Saturday	1	19	11	31	26.7
Not Stated	0	0	0	0	0.0
Total	9	64	43	116	100.0

Fatal collisions occurred more frequently on Sunday and Monday (33.3% each) and not at all on Wednesday and Thursday. Injury collisions occurred most often on Saturday and Friday (29.7% and 21.9% respectively) and occurred least often on Tuesday, at 6.2%.

Comparison of Off-Road Vehicle Collisions
by Day of Occurrence and Collision Type
2000



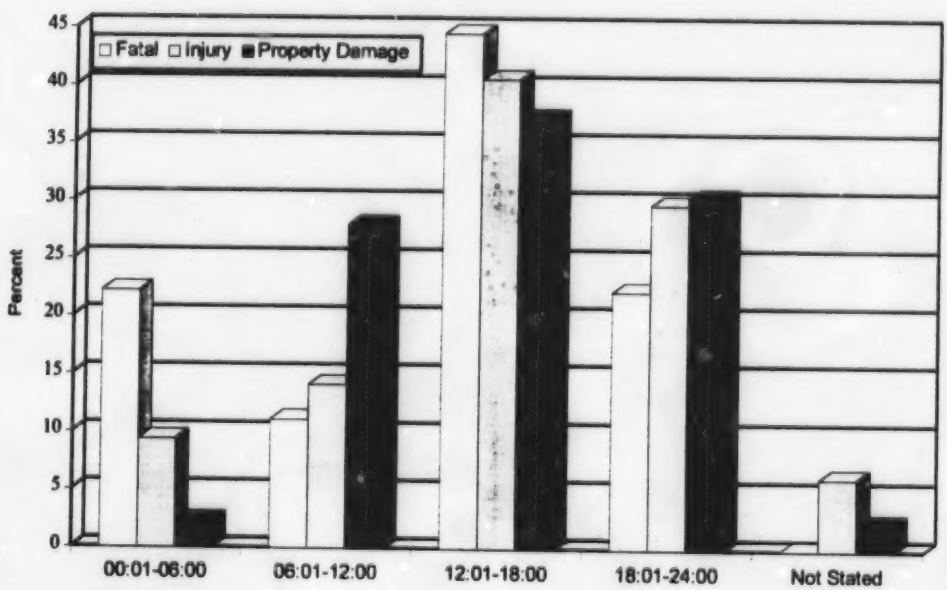
Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collisions
by Time of Occurrence and Collision Type
2000

Time	Collision Type			Total	%
	Fatal	Injury	P. Damage		
00:01 – 06:00	2	6	1	9	7.8
06:01 – 12:00	1	9	12	22	19.0
12:01 – 18:00	4	26	16	46	39.6
18:01 – 24:00	2	19	13	34	29.3
Not Stated	0	4	1	5	4.3
Total	9	64	43	116	100.0

The primary periods for off-road vehicle collisions were between 12:01-18:00 (39.6%) and 18:01 - 24:00 (29.3%).

Comparison of Total Off-Road Vehicle Collisions
by Time of Occurrence and Collision Type
2000



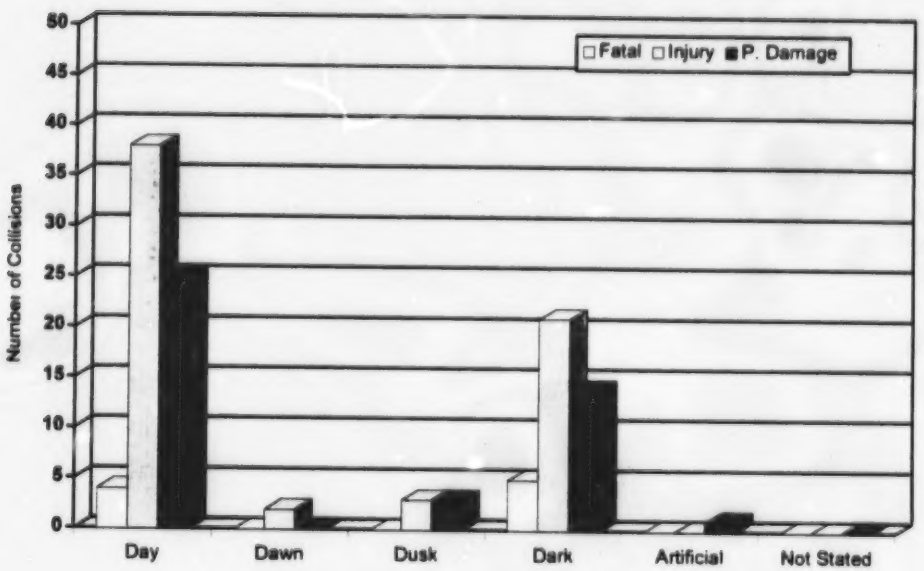
Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collisions
by Light Condition and Collision Type
2000

Light Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Day	4	38	25	67	57.7
Dawn	0	2	0	2	1.7
Dusk	0	3	3	6	5.2
Dark	5	21	14	40	34.5
Artificial Light	0	0	1	1	0.9
Not Stated	0	0	0	0	0.0
Total	9	64	43	116	100.0

55.6% of the fatal collisions happened during darkness. Most (59.4%) injury collisions occurred during daylight conditions, 32.8% took place during darkness, and 7.8% occurred during dawn or dusk. Most (58.1%) property damage collisions took place in daylight, and 32.6% occurred during darkness.

Comparison of Off-Road Vehicle Collisions
by Light Condition and Collision Type
2000



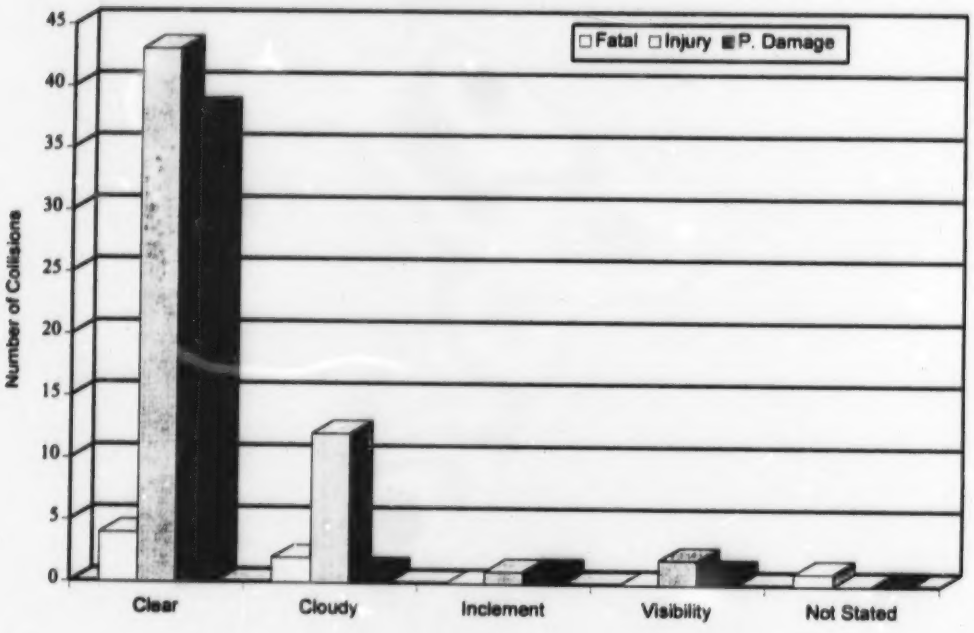
Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collisions
by Weather Condition and Collision Type
2000

Weather Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Clear	4	43	38	85	73.2
Cloudy	2	12	1	15	12.9
Smoke/Dust	0	1	1	2	1.7
Snowing	2	4	2	8	6.9
Fog/Mist	0	1	0	1	0.9
Strong Winds	0	1	0	1	0.9
Drifting Snow	0	2	1	3	2.6
Not Stated	1	0	0	1	0.9
Total	9	64	43	116	100.0

73.2% of all off-road vehicle collisions were known to have occurred during clear weather conditions and 12.9% during cloudy weather conditions.

Comparison of Off-Road Vehicle Collisions
by Weather Condition and Collision Type
2000



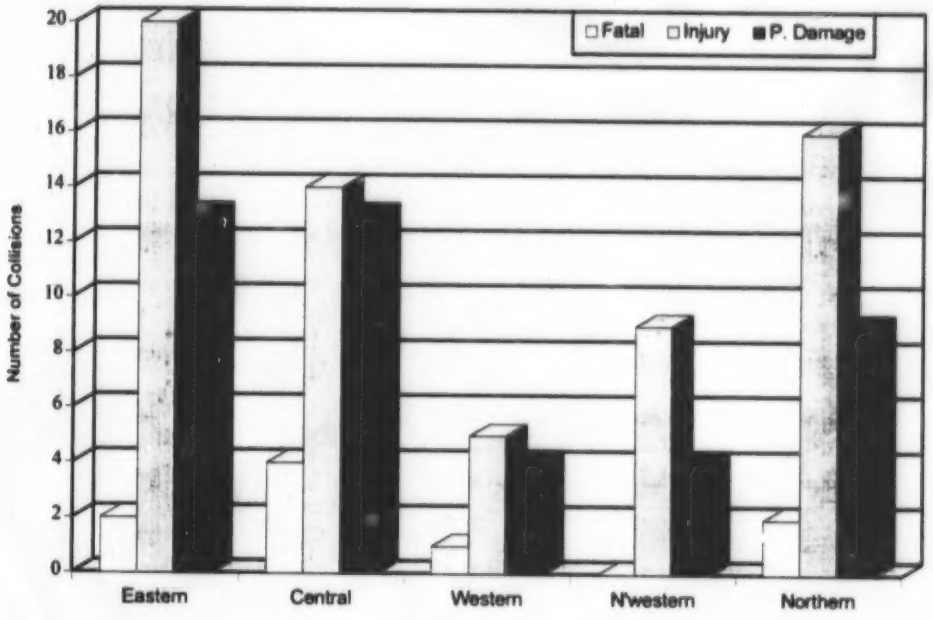
Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collisions
by Manitoba Region and Collision Type
2000

Region	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Eastern	2	20	13	35	30.2
Central	4	14	13	31	26.7
Western	1	5	4	10	8.6
Northwestern	0	9	4	13	11.2
Northern	2	16	9	27	23.3
Total	9	64	43	116	100.0

The "eastern" region of Manitoba accounted for 30.2% (35) of total off-road vehicle collisions followed by the "central" at 26.7% (31), the "northern" at 23.3% (27), "northwestern" at 11.2% (13), and "western" at 8.6% (10).

Comparison of Off-Road Vehicle Collisions
by Manitoba Regions and Collision Type
2000



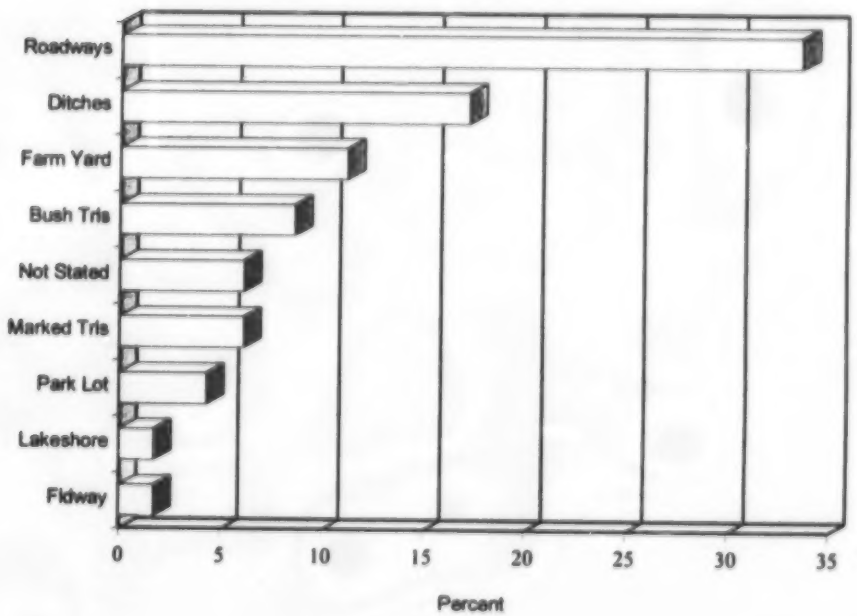
Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collisions
by Collision Location and Collision Type
2000

Location	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Public Roadway	4	21	14	39	33.6
Ditches	0	13	7	20	17.2
River/Lake	1	5	2	8	6.9
Field	0	2	1	3	2.6
Bush Trails/Winter Road	1	5	4	10	8.6
Farm Yard/Private Property	2	7	4	13	11.2
Marked/Groom Trails	0	3	4	7	6.1
Parking Lot	0	2	3	5	4.3
Lakeshore	1	1	0	2	1.7
Floodway/Diversion	0	1	1	2	1.7
Not Stated	0	4	3	7	6.1
Total	9	64	43	116	100.0

"*Public roadways*" accounted for the largest percentage of off-road vehicle collisions, at 33.6%, followed by "*ditches*", at 17.2%, and "*farm yard/private property*", at 11.2%.

Distribution of Off-Road Vehicle Collisions
by Collision Location and Collision Type
2000



Source: Manitoba Transportation and Government Services

Off-Road Vehicle Collision Victims by Age Group, Injury Type and Sex 2000

Age Group	Injury Type						Total Victims
	Killed			Injured			
	Male	Female	Total	Male	Female	Total	
0-4	0	0	0	0	0	0	0
5-9	0	0	0	1	1	2	2
10-14	0	0	0	8	5	13	13
15-19	4	0	4	18	2	20	24
20-24	1	0	1	12	0	12	13
25-34	1	0	1	9	1	10	11
35-44	1	0	1	15	2	17	18
45-54	2	0	2	5	0	5	7
55-64	0	0	0	0	0	0	0
65>	1	0	1	0	0	0	1
Not Stated	0	0	0	0	0	0	0
Total	10	0	10	68	11	79	89

Male victims made up 87.6% (78) of all persons killed or injured, whereas females accounted for 12.4% (11). Of the 89 victims whose ages were known, the age group 15-19 accounted for the highest percentage, at 27.0%. They were followed by the age group 35-44, at 20.2% (18).

Off-Road Vehicle Collision Victims by Safety Equipment and Injury Type 2000

Safety Equipment	Injury Type		Total Victims
	Killed	Injured	
Safety Helmet Worn	4	33	37
Safety Helmet Not Worn	2	17	19
Not Stated	1	8	9
Not Applicable	3	21	24
Total	10	79	89

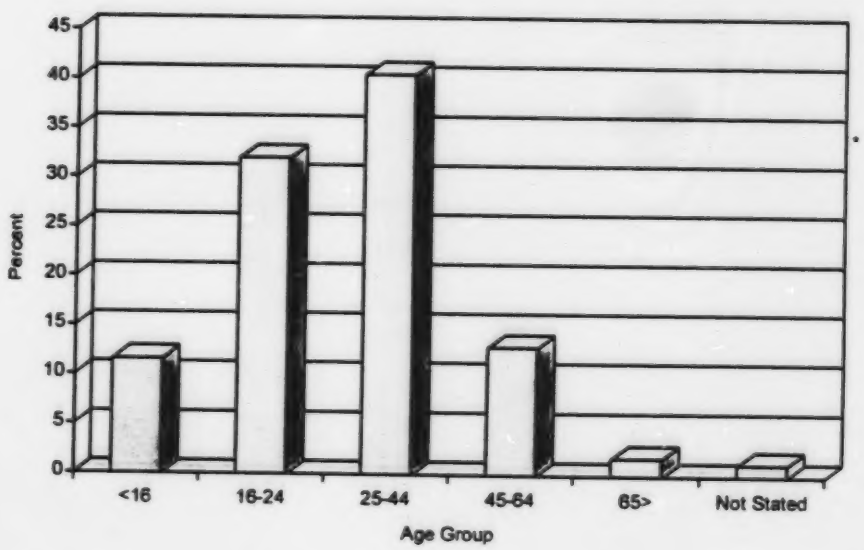
Of the total number of off-road vehicle collision victims, 21.3% (19) were reported as not wearing a safety helmet at time of collision occurrence. Safety helmet use was unknown for 10.1% (9) of the victims.

Driver Involvement
by Age Group and Collision Type
2000

Age Group	Collision Type			Total	%
	Fatal	Injury	P. Damage		
<10	0	1	0	1	0.6
10-15	0	14	4	18	11.0
16-19	2	15	9	26	16.0
20-24	2	14	10	26	16.0
25-34	3	13	15	31	19.0
35-44	4	17	14	35	21.5
45-54	3	8	8	19	11.7
55-64	0	0	2	2	1.2
65>	1	1	1	3	1.8
Not Stated	0	1	1	2	1.2
Total	15	84	64	163	100.0

Of the total number of drivers involved in off-road vehicle collisions, 21.5% were aged 35-44, 19.0% were aged 25-34, and 16.0% each were aged 16-19 and 20-24.

Distribution of Driver Involvement in Off-Road Vehicle Collisions
by Selected Age Groups
2000



Source: Manitoba Transportation and Government Services

Driver Involvement
by Active Driver's Licence and Collision Type
2000

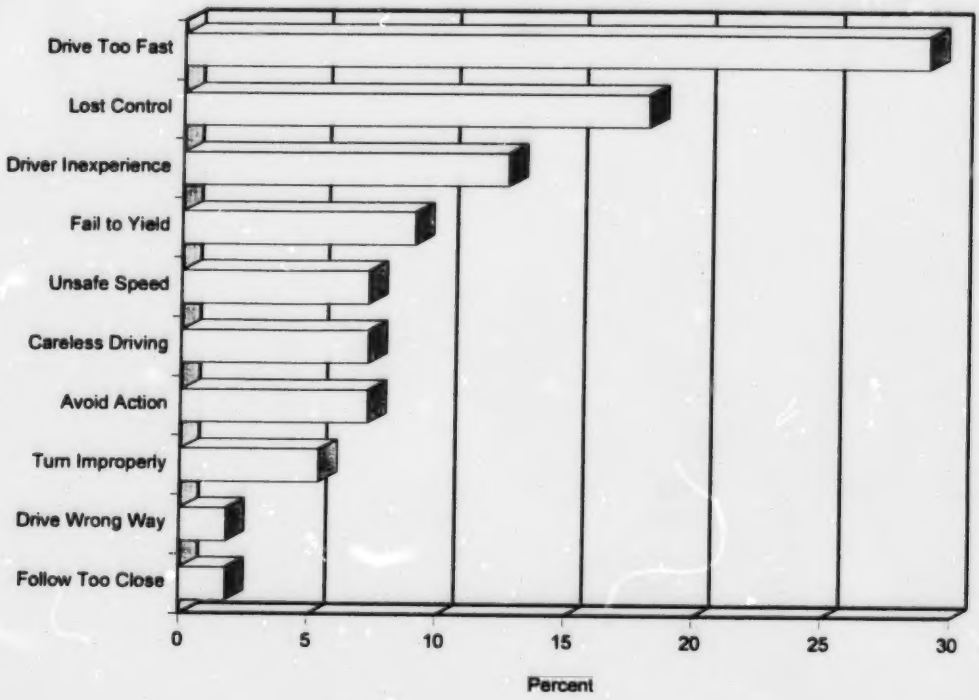
Active Driver's Licence	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Yes	11	54	55	120	73.6
No	3	28	7	38	23.3
Not Stated	1	2	2	5	3.1
Total	15	84	64	163	100.0

It was known that when the collision occurred 73.6% (120) of drivers involved in off-road vehicle collisions had an active driver's licence.

Driver Involvement
by Driver Action and Collision Type
2000

Driver Action	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Drive Properly	1	41	48	90	55.2
Follow Too Closely	0	0	1	1	0.6
Drive Too Fast For Conditions	10	6	0	16	9.8
Unsafe Operating Speed	0	4	0	4	2.5
Fail to Yield	0	3	2	5	3.1
Drive Wrong Way	0	1	0	1	0.6
Careless Driving	0	2	2	4	2.5
Lost Control/ Drive Off Road	3	6	1	10	6.1
Take Avoiding Action	0	3	1	4	2.5
Driver Inexperience	1	5	1	7	4.3
Turning Improperly	0	2	1	3	1.8
Not Stated	0	11	7	18	11.0
Total	15	84	64	163	100.0

Comparison of At-Fault Driver Actions in Off-Road Vehicle Collisions 2000



At-fault driver actions accounted for 55 (33.7%) of all driver actions resulting in off-road vehicle collisions. Of these at-fault driving actions, "driving too fast for conditions" (29.1%), "losing control/driving off roadway" (18.2%), "driver inexperience (12.7%), and "failing to yield" (9.1%) were identified as the most common driver actions contributing to off-road vehicle accidents.

Source: Manitoba Transportation and Government Services

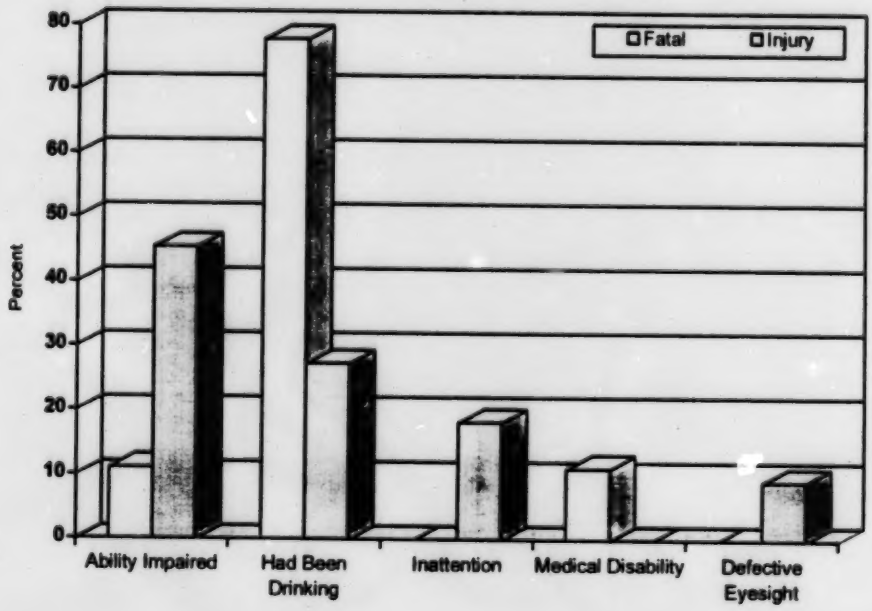
Driver Involvement
by At-Fault Human Condition Factors and Collision Type
2000

Human Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Apparently Normal	2	70	59	131	80.4
Distraction/Inattention	0	2	3	5	3.1
Ability Impaired by Alcohol	1	5	0	6	3.7
Had Been Drinking/Suspected Alcohol Use[1]	7	3	0	10	6.1
Medical Disability	1	0	0	1	0.6
Defective Eyesight	0	1	1	2	1.2
Not Stated	4	3	1	8	4.9
Total	15	84	64	163	100.0

[1]These statistics are understated and represent only those collisions where alcohol involvement was apparent.

Of the 163 drivers involved in off-road vehicle collisions, 24 or 14.7% were cited with having at-fault human condition factors. Of the 15 drivers involved in fatal off-road vehicle collisions, 9 or 60.0% were known to have at-fault human condition factors. Overall, "had been/suspected alcohol use", "ability impaired by alcohol", and "distraction and inattention" were reported as the most common at-fault human condition factors.

Distribution of At-Fault Human Condition Factors
by Fatal and Injury Collision Type
2000



Source: Manitoba Transportation and Government Services

Vehicle Involvement
by Vehicle Condition Contributing Factors and Collision Type
2000

Vehicle Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
No Apparent Defect	9	81	59	149	90.3
Defective Brakes	0	1	0	1	0.6
Vehicle Modifications	0	0	0	0	0.0
Defective Lighting	0	1	0	1	0.6
Defective Suspension	0	0	0	0	0.0
Defective Engine Control	0	0	2	2	1.2
Not Stated	8	1	3	12	7.3
Total	17	84	64	165	100.0

Of the 165 vehicles involved in off-road vehicle collisions, only 4 (2.4%) were known to have an at-fault vehicle condition. Two vehicles had "defective engine controls" while one vehicle each had "defective brakes" and "defective lighting".

Vehicle Involvement
by Environmental Condition Contributing Factors and Collision Type
2000

Environmental Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Glare/Reflection	0	1	0	1	1.6
Slippery Road Surface	1	10	3	14	22.2
Snow Drift	1	6	3	10	15.9
Obstruction/Debris	0	2	5	7	11.1
View Obstructed	0	6	6	12	19.0
Defective Driving Surface	0	03	1	4	6.4
Weather	4	0	0	4	6.4
Wild Animal Action	0	3	2	5	7.9
Prior Accident	0	0	1	1	1.6
Not Stated	0	5	0	5	7.9
Total	6	36	21	63	100.0

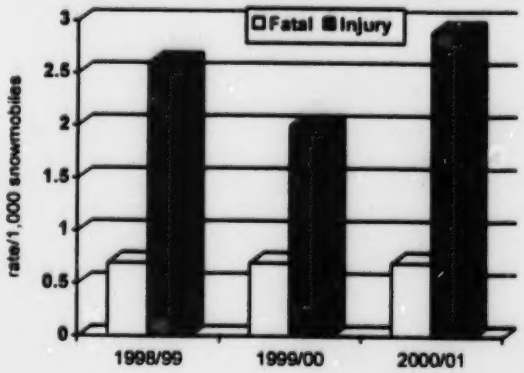
Of the 63 vehicles involved in off-road vehicle collisions due to environmental conditions, "slippery road surface" and "view obstructed" accounted for 26 (41.2%).

SNOWMOBILE COLLISION STATISTICS
1989/99, 1999/2000 (Preliminary) and 2000/01 (Preliminary)

This handout contains **preliminary** information of fatal and injury snowmobile collisions for the riding seasons 1998/1999, 1999/2000, and 2000/2001.

Fatal and Injury Collisions/1,000 Registered Snowmobiles by Riding Seasons

Fatal collision rates have remained steady at 0.7/1,000 registered snowmobiles, while snowmobile injury collision rates have fluctuated. Injury collision rates have decreased from 2.6/1,000 registered snowmobiles in 1998/1999 to 2.0/1,000 in 1999/2000, then increased in 2000/2001 by 45% from 2.0 to 2.9/1,000 registered snowmobiles.



Snowmobile Collisions

Fatal and injury snowmobile collisions are twice as likely to occur on weekends than during the week (68% versus 32%).

The highest incidence of fatal and injury collisions (72.8%) occurred between 12:00 noon to midnight.

More than half of the fatal snowmobile collisions occurred under "dusk" or "dark" light conditions, while an equal amount of injury collisions occurred under "day" and "dark" conditions.

A third of snowmobile fatal collisions happened on public roadways. Almost 42% occurred on the river or lake, while 16% occurred on marked, groomed or bush trails.

Snowmobile Victims

Male victims comprised 78% (135) of all persons killed or injured, whereas females made up 22% (39). The age groups 20-24 and 25-34 had the highest number of injured victims, while the younger age group 15-19 incurred the largest number of fatalities.

Sixty-nine percent of operators involved in fatal and injury snowmobile collisions maintained an active driver's licence at the time of collision occurrence.

.../2

Contributing Factors

Driver error or misjudgement was reported for 75.0% of total operators involved in fatal snowmobile collisions. "Drive too fast for conditions" (66%), "lost control/drive off road" (20.0%), "unsafe operating speed"(7.0%) and "careless driving" (7.0%) were the most common reported driving infractions.

Eighty percent of snowmobile operators involved in fatal collisions and 59% of operators involved in injury collisions were suspected of drinking or being impaired at the time of collision occurrence.

Reports indicate that both alcohol and speed were contributing factors in 42% of fatal snowmobile collisions.

Adverse environmental conditions ("weather", "snow drifts" and "slippery road surface") were factors in half of the fatal collisions.

Appendix H

Health Care Costs Associated With Snowmobile Crashes

(1990 – 1999)

Manitoba
Transportation and
Government Services

Transports et
Services gouvernementaux
Manitoba

HEALTH CARE COSTS ASSOCIATED WITH SNOWMOBILE CRASHES
1990 - 1999

For the entire period 1990-1999:

1. Hospital Stays

Total Length of Hospital Stays
1,509 persons were hospitalized for injuries sustained in snowmobile mishaps. The average hospital stay was 6.60 days, for a grand total of **9,959 hospital days**.

Number Hospitalized by Gender
Males accounted for **75.8% (1,144)** of the total victims hospitalized. **Females** accounted for **24.2% (365)**.

Length of Hospital Stays by Gender
For **males**, the average hospital stay was 7.13 days, for a total of **8,157 hospital days -- 81.9% of the total**. For **females**, the average hospital stay was about 4.96 days, for a total of approximately **1,802 hospital days -- 18.1% of the total.**

Number Hospitalized by First Nations and Non-First Nations
Injured First Nations accounted for **402 (26.6%)** of the total hospitalizations. **Injured Non-First Nations** accounted for **1,107 (73.4%)** of the total.

Length of Hospital Stays by First Nations and Non-First Nations
The average hospital stay for each of the injured **First Nations** was 5.83 days, for a total of **2,343 hospital days (23.5% of the total).** The average hospital stay for each of the injured **Non-First Nations** was 6.88 days, for a total of **7,616 hospital days (76.5% of the total).** (The difference in the length of hospitalization has been attributed to the lower average age First Nations.)

2. Costs of Hospitalization ($1,000/day average)

Total Costs of Hospitalization
Estimated total cost for the 1,509 persons hospitalized for 9,959 days was **nearly $10 million**.

Cost of Hospitalization by Gender
Based on a total hospital stay of 8,157 days, **males** accounted for **$8,157,000 (81.9% of the total cost)**. The cost of hospital stays for **females**, based on 1,802 days, was **$1,802,000 (18.1% of the total cost)**.

Cost of Hospitalization by First Nations and Non-First Nations
Hospitalization of **First Nations** accounted for **$2,343,000 (23.5%)** of the total costs. **Non-First Nations** accounted for **$7,616,000 (76.5%)** of the total costs.

Source: Manitoba Health

Appendix I

Snowmobile Speed Limits and Mandatory Training Programs In Selected Canadian Jurisdictions

(January 2002)

Manitoba
Transportation and
Government Services

Transports et
Services gouvernementaux
Manitoba

Cross Canada Snowmobile Survey, January 2002

Sources of information from each jurisdiction are listed at the end.

1. Speed Limits

No speed limits for snowmobiles have been established in Alberta, Nova Scotia, New Brunswick, and Newfoundland.

British Columbia
Police may establish speed limits as part of the Operating Permit. However, these permits are rarely issued, according to Mr. Macey. On forest service roads, no motor vehicle (including snowmobiles) may be operated at an unsafe speed, and must not exceed 80 km/h or a posted speed limit.

Yukon
"Snowmobiles are allowed to operate on Yukon highways except where municipalities have by-laws prohibiting this practice. They are required to obey the normal laws associated with speed limits."

The definition of a 'highway' is very broad. It includes trails, viaducts, trestleway, sidewalks, ditches, lanes, alleys, squares, etc., etc. It also includes any place, whether publicly or privately owned, any part of which the public is ordinarily entitled or permitted to use for the passage or parking of vehicles and includes a sidewalk and highway right of way.

Northwest Territories
Although municipal by-laws may establish speed limits for all-terrain vehicles (including snowmobiles) within the municipality, ***no by-law may establish a maximum speed limit greater than 50 km/h.***

Manitoba
"Snowmobiles operating on the highway right-of-way or on a highway (where authorized by by-law) must comply with posted speed limits. In other areas, however, there is no prescribed mandatory minimum/maximum speed limits."

Quebec
"Off-road vehicle law and snowmobile regulations set out the permitted speed limits. For snowmobiles, it is, as a general rule, 70 km/h. On certain trails, the speed limit can be 90 km/h if indicated by appropriate road signs. However, in certain locations, for example less than 30 metres from a residence, the speed limit is 10 km/h."

Prince Edward Island
The following regulations apply:

- Sec 16(a) *..no person shall drive at an excessive speed or in a manner which might endanger the safety of persons or property.*
- Sec 20 *No person shall drive ...at a speed exceeding 8kms/hr within 30 meters of a dwelling or place where a person is taking shelter or practising an outdoor sport.*
- Sec 22 "states the Lieutenant Governor in Council may make regulations prescribing rates of speed for off-highway vehicles."
- The Confederation Trail, leased by the Snowmobile Association, posts speed limits in "certain portions".

2. Mandatory Training Programs

Mandatory training programs are not required for British Columbia, Yukon, Alberta, Manitoba, Prince Edward Island, New Brunswick, Nova Scotia, and Newfoundland.

Northwest Territories
"There is no requirement at the territorial level for enrolment in a snowmobile training course. However, municipalities have the authority to enact by-laws. Yellowknife and Fort McPherson are the only communities that require completion of a snowmobile safety course prior to operating a snowmobile.

In Yellowknife, the training course is required if a person is 12 years of age or older and does not have a Northwest Territories driver's licence. In Fort McPherson, a course is required if a person is 14 years of age or older and does not have a Northwest Territories driver's licence.

Quebec
The requirement is somewhat vague. On the one hand, there are "no standards concerning the number of hours of training." On the other hand, "the off-road vehicle associations are responsible for providing this training. The Association of Snowmobiling Clubs of Quebec has mandated a driving school to provide this training and deliver skill certificates."

Sources of Information
British Columbia: Mr. Sam Macey Sam.Macey@icbc.com

Alberta: Mr. Bob Podlubny Bob.Podlubny@gov.ab.ca

Manitoba: Ms. Dianne deKock-Taylor

Quebec: Stephanie Cashman-Pelletier, Agent de recherché en droit, Ministere des Transports; phone (418) 643-0557; steppelletier@mtq.gouv.qc.ca

New Brunswick: Janice Bishop, Department of Public Safety/Operational Policy Branch; Janice.Bishop@gnb.ca

Nova Scotia: Mr. Paul Arsenault, Director, Compliance; Service Nova Scotia and Municipal Relations; phone: (902) 424-7801; fax: (902) 424-0523; arsenapj@gov.ns.ca

Prince Edward Island: Mr. Graham Miner, Acting Registrar, Transportation and Public Works; phone: (902) 368-5223; fax: (902) 368-5236; glminer@gov.pe.ca

Newfoundland: Mr. Geoff Ewing, Manager, Traffic Safety Programs, Department of Government Services and Lands; phone: (709) 729-2502; fax (709) 729-6955; gewing@mail.gov.nf.ca

Northwest Territories: Mr. Rob Thom, Research Analyst, Road Licencing and Safety Division, Northwest Territories Department of Transportation; phone (867) 920-3395; fax: (867) 873-0120; Rob_Thom@gov.nt.ca

Yukon: Mr. Fred Jennex, Manager of Licencing and Deputy Registrar, Motor Vehicles, Dept. of Community and Transportation Services; phone (867) 667-5313; fax: (867) 393-6220; fred.jennex@gov.yk.ca